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Master Thesis

FACTORS AFFECTING THE FRANCHISE CHOICE IN RESTAURANT INDUSTRY IN RUSSIAN MARKET AND ROLE OF DIGITALIZATION IN THEM

2nd-year student of Master program,
Master in Management

IODKO Valerii

Research advisor:
Associate professor
YABLONSKY Sergey A.

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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10.05.2020

АННОТАЦИЯ

Автор	Иодко Валерий Юрьевич
Название ВКР	Факторы, влияющие на выбор франшизы в ресторанной индустрии на российском рынке и роль диджитализации в них
Образовательная программа	Master in Management
Направление подготовки	Marketing
Год	2020
Научный руководитель	Яблонский Сергей Александрович, к.т.н., доцент кафедры информационных технологий в менеджменте
Описание цели, задач и основных результатов	Цель данного исследования - выявление факторов, влияющих на выбор инвестором конкретной франшизы в ресторанном бизнесе, а также оценка влияния диджитализации на привлекательность современных франчайзинговых предложений. Основные задачи: • Установить ключевые факторы привлекательности франчайзингового предложения в ресторанном бизнесе на основе исследования научной литературы и анализа практического опыта • Разработать методику по оценке привлекательности франчайзинговых предложений ресторанной отрасли на основе выбранных критериев и количественного анализа результатов анкетирования • Выявить влияние факторов диджитализации на привлекательность франчайзинговых предложений Основные результаты: • Ключевые факторы привлекательности фрачайнзинговых предложений в ресторанном бизнесе были установлены и представлены в форме иерархической системы показателей • Была разработана методика оценки привлекательности франчайзинговых предложений в ресторанном бизнесе • Методика была протестирована на примере четырех кейс компаний • Разработанная методика позволяет выявлять сильные и слабые стороны франчайзинговых предложений и улучшать их
Ключевые слова	Франчайзинг, ресторанный бизнес, диджитализация, АПИС, разработка методики

ABSTRACT

Master Student's Name	Iodko Valerii Yurievich
Master Thesis Title	Factors Affecting the Franchise Choice in Restaurant Industry in the Russian Market and Role of Digitalization in Them
Educational Program	Master in Management
Main field of study	Marketing
Year	2020
Academic Advisor's Name	Sergey A. Yablonsky Associate Professor, Department of Information Technology in Management
Description of the goal, tasks and main results	Research goal - identify the factors that influence the choice of a particular franchise in restaurant business by an investor, as well as to assess the impact of digitalization on the attractiveness of contemporary franchising offerings Main tasks: • To identify the key indicators of the attractiveness of franchising offers in the restaurant business based on the study of scientific literature and analysis of practical experience • Develop a framework for assessing the attractiveness of franchising offers in the restaurant industry based on selected criteria and a quantitative analysis of the survey results • Identify the impact of digitalization factors on the attractiveness of franchised offers Main results: • The key indicators of the attractiveness of franchising offers in the restaurant business were established and presented in the form of hierarchic system of indicators • A framework was developed to assess the attractiveness of franchising offers in the restaurant business • The framework was tested on the example of four case companies • The developed framework allows you identify the strengths and weaknesses of franchising offers and improve them
Keywords	Franchising, restaurant business, digitalization, APIS, framework development

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INTRODUCTION

The modern franchise market in Russia is actively growing and changing. In 2019 alone, the increase in restaurant industry amounted to more than 19% in the number of franchises (BCG, 2019) available for purchase. Currently, in Russia, the number of population, employed in franchised networks is more than 1.5 million people. One of the main drivers of market growth was the digitalization of the industry and the emergence of digital platforms that allow companies perform more efficiently and cut the scaling costs. Many investors and potential businessmen are thinking of buying a franchise. However, on the other hand, at the moment there are a huge number of franchises, but there is no system of objective assessment of the attractiveness of one or another option. Moreover, it is still not clear how digitalization in the future will affect the franchising market and what benefits it can bring to new players in the market.

Research gap

The Russian franchise market is poorly studied, and there is currently no framework for evaluating the prospects for choosing a particular franchise, especially in the restaurant industry. There are similar studies abroad, but they do not take into account the latest trends, such as digitalization of the industry.

Research goal

The goal of the current study is to identify the factors that influence the choice of a particular franchise in restaurant business by an investor, as well as to assess the impact of digitalization on the attractiveness of contemporary franchising offerings.

Research questions:

1. What factors influence an investor's choice of a particular franchise in restaurant business?
2. How does digitalization of franchising affect the company's advantages in the franchising market?

The result of the work will be the formation of a framework that will allow identifying the most attractive factors when choosing a franchise by an investor. From the point of view of the managerial implication, using the framework will allow companies to improve the weaknesses of their business models and work on the attractiveness of franchises.

CHAPTER 1. FRANCHISING AS A BUSINESS MODEL

1.1 Background

Today, more than 3 000 companies (BCG, 2019) use franchising as a model for expansion and development in the Russian Federation and more than 800 of them are representatives of the restaurant industry. A lot of new, modern, technological projects are emerging as startups, which, having become successful, can become the basis for the formation of a franchise. In the past few years, digitalization has become one of the biggest trends in the industry (Perrigot, Basset, Cliquet, 2017). The advent of information technology in franchising has had a significant impact on emerging markets and their major players. Companies wish to understand what effect the introduction of digital technologies can have and how this will affect the desire of customers to acquire a particular franchise in restaurant business.

1.2 Definition of franchising

After the appearance of private enterprise in Russia in the late twentieth century emerged companies that operate on the basis of a specific form of relationship – franchising. The first company to use the classic franchise scheme is the German company Singer, which produced sewing machines, which sold the rights to distribute and service its products under its own brand to entrepreneurs in the United States. Definitions of the term «franchising» as part of a given discipline or field can have substantial differences. At the origin of the thesis, it is deemed necessary to provide some definitions of the mentioned term and a range of interconnected concepts.

According to Merriam-Webster (2018) dictionary, the franchise is defined as the right or license granted to an individual or group to market a company's goods or services in a particular territory. This is one of the most popular formulations, taking its roots in the 14th century, from the French word "franchise", which appeared in the Middle Ages and denoted the rights and benefits provided by the monarchs. Spinelli (2004) suggested that franchising – is the practice of applying the right to use the business model and brand of a firm over a period of time. In his work, Spinelli extends the concept of franchising from the right to use a business model to the use of a brand of a company, thereby adding the concept of branding and licensing to the wording. The European Franchise Federation (2017) more broadly considers this term. Franchising is a system of marketing of goods, services and/or technologies, which is based on close and constant interaction between legally and financially independent enterprises, the franchisor and individual franchisees, and the franchisor in exchange for direct or indirect financial remuneration gives the franchisee the right and imposes an obligation to conduct business in accordance with the concept

of the franchisor, using its trademark, trademark, know-how, technical methods and/or other intellectual property rights. Schwartz (2008) adds to the terminology the relations of two parties, the so-called “franchisee” and “franchisor”.

A franchisor is a company that issues a license or transfers its right to use its trademark, know-how, and operating systems. For example, the franchisor creates a successful product or service, say, a special style of fast-food restaurant. The franchisor explores and develops the business, spends money on promoting the business, creates a good reputation and recognizable image (called the “brand name”). After a company has proven the business concept and successful reproducibility of this business, it can begin to offer entrepreneurs who want to repeat this success to buy their franchise. A franchisee is a person or company that buys training opportunities and assistance in starting a business from the franchisor and pays a service fee (royalties) for using the trademark, know-how, and system of the franchisor. The franchisee pays for the costs of creating a business. Very often, the franchisor provides very favorable discounts on important deliveries (materials, supplies). These discounts always give the franchisee the opportunity to buy products from the franchisor at a lower price and thus it is cheaper than developing a business without a franchisor. The franchisee assumes the obligation to pay monthly fees for the right to use the trademark and business system and for the support, training and consulting provided by the franchisor. If everything goes according to plan, then the franchisee leads a successful business, and its profit exceeds costs. Summing up the essence of franchising, it is necessary to list the main elements (Canabal & White, 2008) on which it is based:

- A product or service that has gained popularity in the market;
- A well-known and recognizable brand;
- A proven business system and well-established business processes that a franchisee must follow in order to develop a business;
- Replicability of a business (the exclusivity of a business makes it unsuitable for a franchised development model).

In exchange for these elements, depending on the terms of purchase of a particular franchise, it is obliged to make the following types of payments:

- Lump-sum (one-time) payment;
- Periodic payments (royalties);
- Payment for the supply of goods.

Thus, for the purpose of this thesis, the term “franchising” can be defined as a system of relations between two (or more) independent enterprises, according to which the franchisor transfers to a franchisee one or more franchisees a set of exclusive rights to conduct business in

accordance with the basic concept and using the means of individualization of the franchisor, and also agrees to provide advisory or other assistance to the franchisee in order to establish the success of the franchise network. This terminology will be narrowed down in further sections of the work and applied to the restaurant industry in section 1.6. Several related concepts have also been described in this part, such as brand name, franchisee, royalty, service fee and trademark.

1.3 Existing research on franchising

Of the greatest interest for this scientific work are works devoted to the evolution of the franchising model, as well as representing different points of view on the significance of qualitative and quantitative factors of franchising business model. For example, Matt Haig in his book “Brand Failures” shows that now when making a purchasing decision, consumers are guided not so much by the quality of the product as by the perception of the brand. The same rule can be extrapolated to people who want to acquire a franchise in a particular industry. They are also consumers, but in this case the market will already be slightly different.

George Ritzer in his 1993 book called the processes in society, "McDonaldization", by the name of the largest franchise network in the world. With this term he described a phenomenon in which the entire social system, its institutions and organizations, have the same characteristics as fast food chains, namely efficiency, measurability, predictability and controllability. Efficiency implies an emphasis on minimizing costs, time in the first place. Measurability in this context means an emphasis on quantitative rather than qualitative indicators. By predictability, the scientist understood a standardized result that guarantees the receipt of identical goods and services at the exit. Finally, controllability, according to Ritzer, means monitoring management over workers' actions and replacing manual labor with machine labor where possible.

A strong brand can be a good tool for promoting products or services on the market. However, if we are talking about a startup or small company, the primary basis is not a brand, but a quality service or product. Thus, Lee Hower, an investor and startup specialist, cites the example of modern giants such as Google, eBay and Cisco, which a couple of decades ago did not have such a well-known brand, but built their success on a high-quality and progressive service.

Based on the fact that a brand is not always an obligatory component for business development and there are a large number of factors listed above that influence the success of a franchise and we can conclude that a competitive franchise offer is a set of both qualitative and quantitative factors.

The classical franchising model is described in a large number of scientific works of previous years. A whole group of sources is devoted to the features of franchising as a model of doing business, for example, works by Blair R. and Lafontaine F., Norman J. and S. Shein Deltey.

There are also a large number of approaches to classifying relationships in franchising. In sections 1.3.2, 1.3.3, 1.3.4, the most popular of them will be presented, as well as various types of relations between the franchisee and the franchisor will be considered.

1.3.1 Classification by the nature of activity

Classification by the nature of the activity of the franchise implies the classification of franchises (Kolesnikov, 2011) to three different types:

1. Product franchising;
2. Manufacturing franchising;
3. Business franchising / franchising business format.

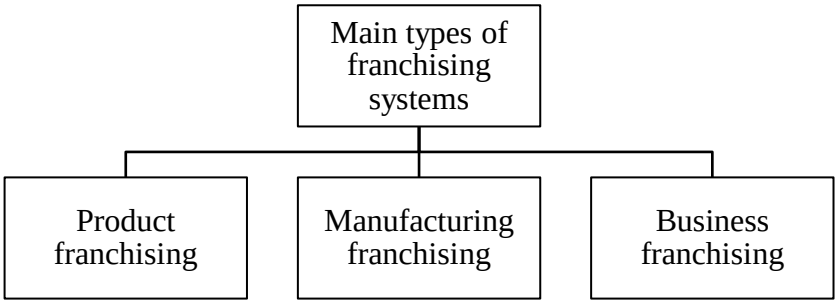

Figure 1 *Classification of franchises (Kolesnikov, 2011)*

Product franchising means the transfer of the right to sell goods produced by the franchisor in a specific territory. This type of franchising includes, for example, franchises of clothing stores Gulliver, FORWARD and cosmetics stores LOCCITANE and LUSH well-known in the Russian Federation.

Manufacturing franchising includes the transfer of the right to manufacture and market products under the franchisor's brand. Coca Cola and Pepsi are manufacturers of soft drinks as an example for this type, but it should be noted that the composition of the drink is kept in strict confidence, and only the proportions in which it is necessary to mix the components are disclosed to the franchisee.

During **business franchising**, the franchisor transfers the franchisee the right to completely copy the business format, while the franchisee assumes the corresponding obligation.

For a better study of the main types of franchising, Table 1 is presented below:

Table 1 Types of franchising

Type of franchising	Type of franchise	Advantages	Disadvantages
Product franchising	Goods / Product	Easy to use	The franchisee works in a limited field of activity, a narrow specialization
Manufacturing franchising	Technology / Source Component	Franchisor is easy to control the franchisee, high efficiency	Large initial franchise acquisition costs are required, the franchisee is highly dependent on the franchisor
Business franchising	Franchise business model	Large scope, quick adaptability to market conditions	Franchisee initiative is often suppressed by over-regulation

Based on the above material and the table presented, it can be concluded that of all types of franchising, the most preferred and promising today is business franchising (Gitman, 2018), since the main advantages of this type are its wide scope and quick adaptability to market conditions, which favorably affects the creation and conduct of business in the franchise system. Some of the vivid examples of that type of franchise are restaurant chains such as McDonald's, KFC, Burger King, Dodo Pizza, Dominos, Cofix and others. This type of franchising will be presented in detail in the paper, as about 90% of restaurant chains work on this principle. Moreover, in the third chapter of this work, examples of franchising models of companies presented above and draw conclusions on their franchising attractiveness will be considered.

1.3.2 Participants classification

Any franchise model can be described from the point of view of its participants (Rubin, P. H. ,1978), according to Figure 2.

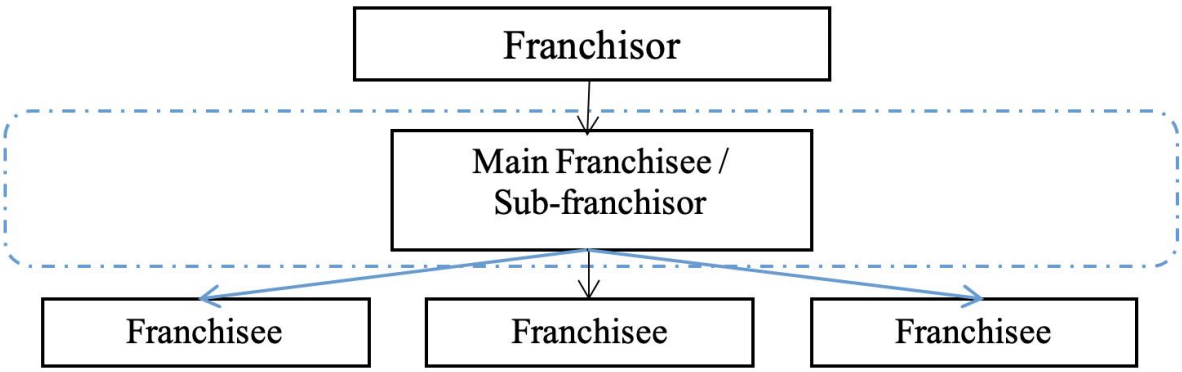

Figure 2 *Franchising parties (Rubin, P. H. ,1978)*

There is such a type of franchising as sub-franchising. In the case of this form, in addition to the two above – mentioned participants, a third one appears in the system, the sub-franchisor. The parent company gives it a greater amount of exclusive rights, thanks to which it can not only follow the standard business scheme of the franchisor but also open its own branches or sell the brand franchise to new attracted franchisees. Thus, the sub-franchisor becomes the Deputy head company in the territory defined by the franchisor, since it is transferred part of the relevant rights and functions, as well as responsibilities, including advising the franchisee, servicing and developing the brand.

The company's use of franchising strategies has traditionally been explained in terms of several concepts. In particular, agent theory indicates that the choice between development through franchising and an increase in the number of own divisions of a company depends on the amount of agent costs (Caves, Murphy, 1976; Jensen, Meckling, 1976; Fama, Jensen, 1983; Brickley, Dark, 1987; Lafontaine, 1992). A significant advantage of franchising is the direct connection of the franchisee's income with the results of the activities of the unit he leads, which makes the emergence of opportunism in this situation less likely. In general, the financial reward system corresponding to the franchising strategy leads to the emergence of a higher incentive for the franchisee to effectively manage the division than the managers of their own divisions of the company (Fama, Jensen, 1983). Thus, companies often prefer development through franchising to creating their own divisions, despite the additional difficulties of controlling franchisees compared to managers of their own departments (Cochet and Garg, 2008). The possibility of attracting financial resources at relatively low costs created by franchising (Laurie, 1995) allows firms to increase their market share without attracting significant amounts of debt financing or equity (Roh, 2002).

In accordance with agent theory, franchising is an effective way of organizing a business in a situation where the marginal cost of monitoring the actions of managers of the unit owned by

the company is higher than the cost of implementing a franchise agreement (Rubin, 1978; Brickley, Dark , 1987; Brickley, Dark, Welsbach, 1991). In this case, franchise contracts allow to shift a significant share of management and monitoring costs to franchisees, which reduces the cost of growth of the company (Shane, 1996). The development of franchising is a separate direction of the organization, which requires the company to have special competencies. The parallel development of our own and franchised divisions allows us to diversify our business lines, helping to reduce the risk and cost of capital, which ultimately leads to an increase in its value (Koh, Lee, Boo, 2009).

1.3.3 Business environment classification

A single franchisee is certainly a separate business unit (Hackett, D., 1976). If we consider the processes that occur within a franchisee business unit, we can create a visual map that covers four areas of its existence (Figure 3).

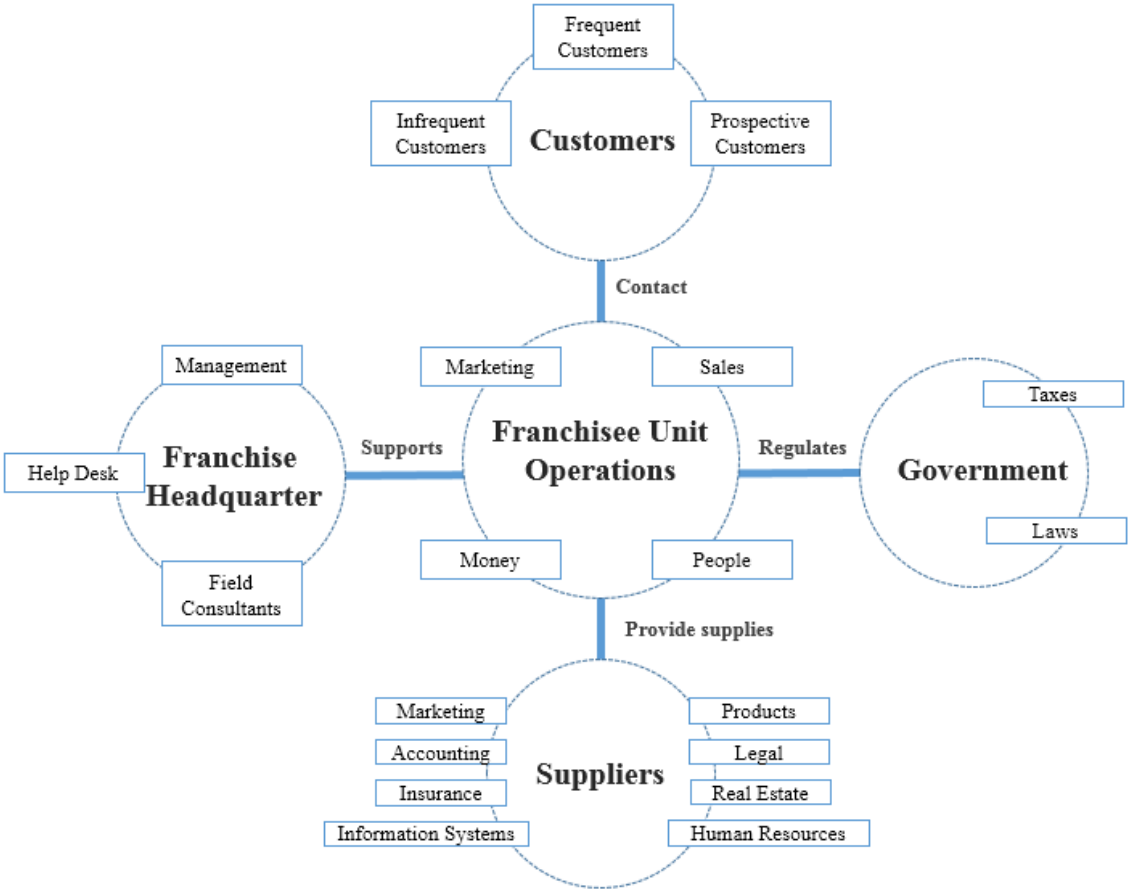

Figure 3 *The business environment of the franchisee unit*

Price and Purdy (2001) call the franchisee unit a “satellite” to the franchisor. As part of the franchise, it interacts with four main areas:

Customers. The main operational task of the franchisee is to sell products or services to its potential customers. Of course, it is necessary to mention that in this system, customers are the main element, because it is they who generate revenue for the franchisee and create added value for the business. Using marketing and advertising, franchisees interact more effectively with customers, and a high level of brand recognition allows them to better attract new clients. Customers can be divided into three main categories:

- Frequent customers are those, who return after the first purchase and make more transactions compared to other segments. They make transactions more regularly compared to others and, in turn, franchisees strive to ensure that the retention this segment is the highest;
- Infrequent customers make irregular and spontaneous transactions, the goal of the franchisee to work with these customers is to remind about their product and encourage them to make purchases;
- Prospective Customers are those people who are potentially interested in buying, but have not yet completed a single transaction.

Franchisor headquarter. In order to help franchisee business, a franchisor headquarter provides help desk services on issues happening during the unit operations, personal demonstrations from visiting field representatives, and training and continued education from the management group of the franchisor.

Government. In turn, the franchisee, as a business unit, is also subject to all regulatory measures by the state, including taxes and laws related to doing business in the country.

Suppliers. In the franchising business, suppliers play a much broader role than in retail or services. Their field of activity is not limited to the sale of materials and goods. This segment includes marketing services, legal, HR consulting, real estate agents and a huge number of additional features. In terms of chosen topic, it is also necessary to dwell on the role of information systems in the services supplied to the franchisee. Recently, there has been a big trend in the digitalization of franchising and the availability of a modern information platform plays a crucial role with a successful franchise economy. This topic will be covered in more detail in the following chapters.

1.3.4 Relationship management classification

From the point of view of interaction between the franchisee and other participants in the system, the following visual map can be drawn:

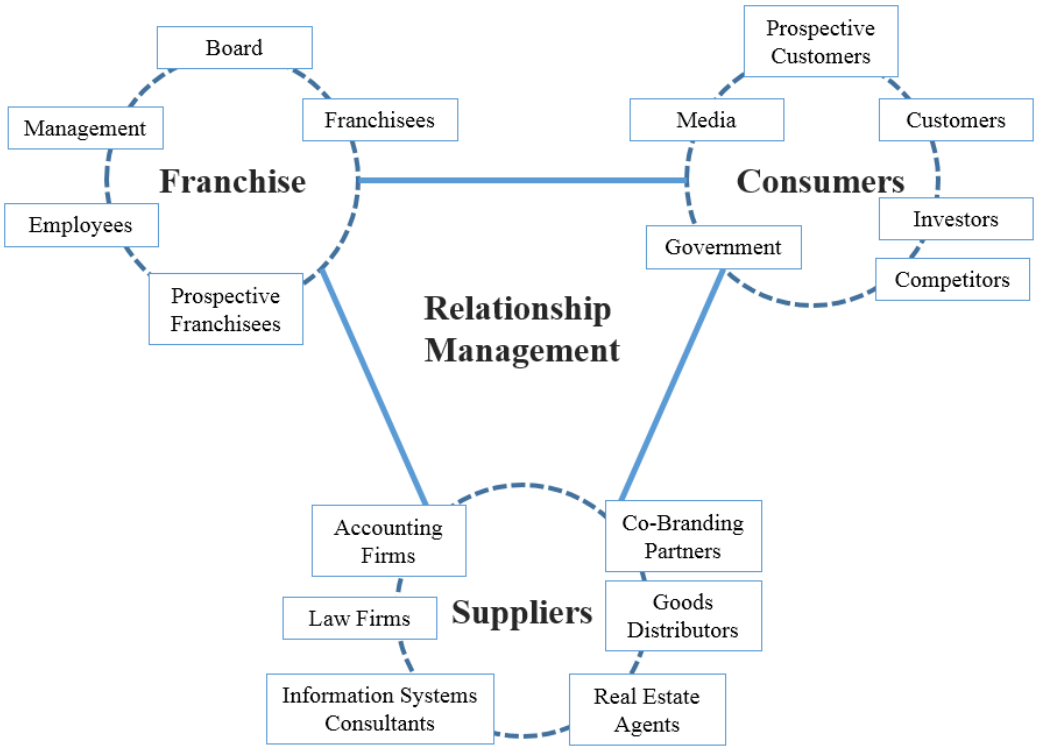

Figure 4 *The network franchise community*

Relationship management within the franchise system, where a franchisor builds up relationships with the board of directors, franchisees, prospective franchisees, franchisor management and employees, and most importantly the franchise advisory council (Justis and Judd, 1998). FACs are often used as a method of informing franchisees of priority developments, such as the introduction of new products and services or changes that will affect the entire system. Groups meet on a schedule that they define, for example, twice a year or every four months. With FAC, the franchisor oversees operations and retains decision-making authority (Croonen, E. 2010). They often create documents that govern the Board and set procedures and policies for selecting members, which usually involves meeting certain conditions and criteria. Most councils choose the members using the election instead of direct assignments. One of the significant problems that arise during the relationship between the franchisee and the franchisor is encroachment – a situation where the expansion of the franchisor company has a negative effect on subsidiaries (Hellriegel and Vincent, 2000).

Relationships with clients, including investors, media and the state. Obtaining media certifications has a positive effect on the strength of a franchise brand and plays an important role in attracting new members (Shane and Foo, 1999) to its network.

Relations with suppliers, including law firms, partner companies, product distributors, information system consultants, marketing companies and other counterparties.

1.3.5 Formation of franchise

Concession agreement

In Russia, an analogy to franchise agreement is a commercial concession agreement. According to it, one party (franchiser) undertakes to provide the other party (franchisee) for a fee for a period of time, the right to use a set of exclusive rights belonging to the copyright holder in the franchisee`s business, including the right to a trademark, service mark, as well as rights to other objects of exclusive rights stipulated by the contract. In general, a commercial concession agreement is in many respects similar to the franchising system used in other countries. For example, the copyright holder denotes in the contract the territory in which the user is obliged to conduct his activities, and can also give the right to transfer the received complex of exclusive rights to other potential users, which is called subconcession. The user is obliged to pay remuneration to the right holder, as in the franchise system, and in addition to this, observe the concept of doing business and guarantee the appropriate quality of the goods or services produced. The main differences and features of the commercial concession agreement are presented in the Table 2.

Table 2 Comparison of franchising and commercial concession agreements

Comparison criteria	Franchising agreement	Commercial concession agreement
Contract time	Strictly defined	Determined or not determined at the discretion of the copyright holder
Help provided by the copyright holder to the user	Normative	Dispositive rule of law: provided or not provided by contract
Actions upon expiration of the contract	Conclusion of a new contract at the request of the parties	The user's right to conclude a new contract for the same period and on the same conditions in the case of conscientious work
Responsibility of the copyright holder for the requirements presented to the user	Absent / subsidiary in specific cases (for example, when the franchisor is a supplier of products)	Subsidiary
Number of copyright holders in the system	One	One or more

Stages of formation of franchise

An enterprise that has chosen the creation of a franchise network as a business development strategy should correctly assess its capabilities. A potential franchisor must, firstly, have a well-known brand, image, and stable business. Secondly, the franchise system will be successful only if there is a competent interaction between the franchisee and the franchisor, so the latter should develop training courses, engage in staff selection, create an effective system of document management, control and reporting. The stages of building a franchise system, as well as key tasks and basic objects of analysis within each step, are presented in the table.

Table 3 Stages of building a franchise system

Stage	Description	Key tasks
Organization of the pilot project	the creation of the first experimental enterprises (in the absence of a previously established franchise businesses in a particular region/industry)	– definition of the position, the necessary technological lines of the staff; – development of system of training future franchisees; – drafting of the rules of engagement of the franchisor and franchise; – development of the system of access to the results of intellectual activity of the franchisor and the system of control over their use, determine the volume of the transferred rights; – approval of internal standards technical execution of the project, organization of work, design, brand design, ethics of business relations, etc.
Marketing research	the Implementation of a set of 4P in relation to the franchise	– identification of potential franchisees, – the development of franchising proposals and promotional materials; – determining the amount of assistance the franchisor; – determination assign franchisee's territory, the number of granted sub-licenses (for subfranchizing); – setting the value of the franchise, the size and periodicity of the royalties are paid; – development of joint programs for the promotion of target products, to determine the degree of participation of the franchisee in them.
Preparation of the franchise package	Development of key documents and services transferred by the franchisor franchisee	– registration necessary intellectual property rights, not previously processed and transmitted for use by the franchisee; – detailed preparation for the transfer of a package of key documents: guide to business, guide to management reporting package provided by the franchisor services

Table 3 Stages of building a franchise system (continuation)

Stage	Description	Key tasks
Selection of potential customers for franchise	Analysis of potential franchisees to further attract them into the system	– to identify a list of characteristics that determines the ability of franchisees to ensure the proper functioning of the franchise system; – development of methods for the assessment of these characteristics, as well as the procedure for their conversion to some integral performance indicator; – collecting the necessary information about a potential franchisee; – the formulation of recommendations for cooperation or justification for non-cooperation with certain franchisees depending on the total value estimate increased
Organizing a franchising network	Final signing of the contracts and run a franchise system	– the conclusion of a franchise contract; training the franchisee; – quality control, consulting and providing necessary assistance

This is a general framework for the formation of a franchise business model (Gillis, W., & Castrogiovanni, G. J., 2012), it is applicable for various industries, however, it requires adjustments, taking into account the specifics of a particular industry. The paper is focused more on the digitalization of the franchise and the factors that influence the desire to purchase a particular franchise, therefore, in the previous part, a brief analysis of the conceptual framework of franchising was carried out to provide a common understanding of the work of the business model.

1.3.6 Main trends in the Russian market

Speaking of trends, there are six main trends (RBK, 2019, Author) in franchising in the Russian market:

- Adjustment of franchise conditions for Target Auditory. (TA) is a necessary measure for management companies. This may include a decrease in start-up capital, and the development of new formats for specific needs. For example, we have several types of coffee bars, ranging from racks to full-blown coffee houses. Also, many companies now offer new formats for partner support, provide loans and installments.
- The development of own financial instruments to support partners is one of the promising areas in franchising. A vivid example is Dodo Invest (dodoinvest.com). It lies in the fact that the investor, having invested money in a new point, will receive a monthly share of its profits without participating in management and business processes. The franchisee, who is trained and supervised by the management company, will engage in the development of this area.

- Consolidation and expansion. Federal networks are easier to survive than single points (RBK, 2020). They are offered more favorable rental conditions, optimal prices for the purchase of raw materials, for the placement of advertising campaigns. Due to the high rental value, we are now trying a new strategy to provide franchisee partners with retail space. The management company finds places and offers them to partners.
- Collaborations. Since ancient times, it is believed that it is easier to survive by communities. With a naked eye you can see how various large networks from different segments are increasingly offering comprehensive services. We tried a similar format with Beeline communication salons. Tele-2 merged with Cofix, Subway with OBI and Leroy Merlin, Aeroexpress with Starbucks.
- A reference to a healthy lifestyle. Over the past three years, the number of farm stalls has increased 3.5 times according to Buybrand.ru. In the coffee sector, this trend can be seen in an increase in the demand for good nutrition in coffee houses, as well as an increase in interest in lactose-free drinks.
- Technology development is a ubiquitous trend that has captured and franchising. The use of ERP systems (a unified company resource management system) is a prerequisite for the quality regulation of relations between the management company and the franchisee. The most high-tech companies are developing their own ERP systems. A number of companies use Big Data analytics, which allows market participants to predict the return on sales points and improve business processes.

1.4 Digitalization of franchising

Traditional ways of doing business changed during the digital age. Digital business now refers to the creation of new business designs by blurring the digital and physical worlds. It promises an unprecedented convergence of people, businesses and artificial agents (things, smart things and smart machines) that changes existing business models and creates new revenue opportunities and platform designs (Cearley et al., 2017; Yablonsky, 2019). Franchising is not an exception for such changes and for several years in scientific sources, references to “digital franchising” can be found. In order to determine the terminology used in this context, it is necessary to give the wording of this term. Digital franchising is a digital technology with which modern franchisors build relationships with their franchisees – from remote process control, reporting and control to training, daily communication, prediction of analytical indicators and automation of business processes (Buckingham, D., 2015). The term includes the deep transformation of products using cutting-edge technologies, such as: Internet of Things, Artificial

Intelligence, Big Data and everything that has a strong influence on the transformation of the economy and relations in society.

The general concept of digital franchising is presented in the Figure 5:

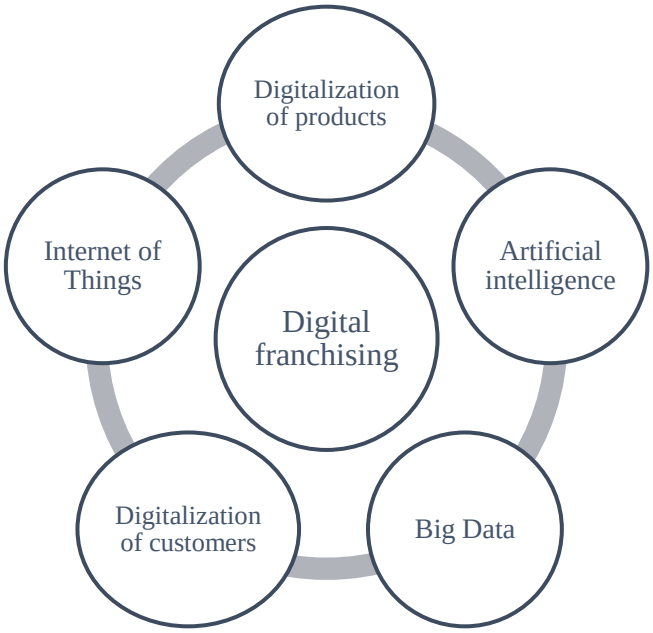

Figure 5 *Digital franchising concept*

Digital franchising can also be considered as a digitization of the creation of a franchise, as a transition of franchising business to online, where almost all processes can be automated. In other words, digital franchising is the new reality of the economy in the post-industrial era.

M. Castells, arguing that the post-industrial era is being completed by the formation of a new information society, pointed out that along with these processes, the transition to a new type of economic relations, which he called the information economy, is also objectively traced. In the works of M. Castells it is convincingly substantiated that scientific and technological progress (including the use of information, digital and other technologies) is a catalyst for transformations in the structure of national economies, as well as in the structure of the global economy.

Breakthrough technologies increase the competitiveness of companies by increasing business value, streamlining management and improving production processes. In accordance with this, the investment attractiveness and profit of the company are growing. Unlike conventional automation of commercial facilities, digital transformation is changing the business structure, development strategies of the sales and management system, creating new products and services that combine them into entire industries.

The transformation of business models does not occur on its own, its main drivers are digital platforms, which are subsequently used by companies to create certain offers on the

franchising market. In order for better understanding the context of the paper, it is necessary to provide some definitions of the “digital platform” term.

A digital platform can be characterized as a sociotechnical assemblage encompassing the technical elements (of software and hardware) and associated organizational processes and standards (Tilson et al., 2012). As platforms are mashed up into larger digital infrastructures, digital platforms are becoming increasingly complex research objects (Evans and Basole, 2016).

With new digital business models, resources may be added or combined in new and different ways to support the digital platform strategy; an organization may also begin with a set of resources applied across the entire business or else apply specific assets to a few areas.

The following integration of Business and Technological platform counterparts in the multilayered digital platform stack was proposed by Yablonsky (2018a, 2018b):

Business platforms stack:

1.1. Business model and leadership platform.

1.2. Talent platform.

1.3. Delivery platform.

1.4. Promotion platform.

1.5. Others.

Technology platforms stack related with innovation technologies:

2.1. Information systems platform.

2.2. Customer experience platform.

2.3. Data and analytics platform.

2.4. IoT platform.

2.5. Ecosystems platform.

2.6. Trust platform.

2.7. Integration platform.

2.8. Other.

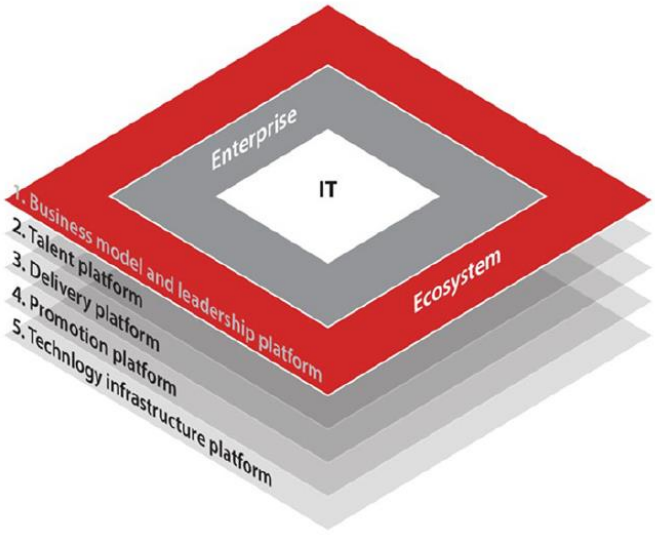

Figure 6 *Digital platform stack (Yablonsky, 2018)*

All of these platform elements make up the complex part of the ecosystem, which in turn is being developed specifically for the needs of a particular company.

One if the most vivid examples of such platforms usage in restaurant industry is the company Dodo Pizza, which offers its franchisees not only favorable financial conditions, but also their own information system (dodopizza.dev) specially designed for automation and robotization of fast food company management. Developing such a system, the main idea of the company was that the more digitized processes the franchisor makes available to the franchisee, the greater the value of the franchise. Dodo IS includes production modules, management interfaces for a pizzeria managers, customer services, and a marketing solutions database. It began with as a block for receiving orders, and now it is a full-fledged cloud ERP system. It manages customer orders, kitchen work, scheduling, inventory, and finance. For example, orders are accepted through a single corporate call center, on the Dodo Pizza website and through a mobile application. The system immediately transfers them to tablets installed in the kitchens. Using the information system, the delivery of orders by couriers is distributed and, for example, the planning of personnel requirements during the working day (employee work schedules). According to the company, all development issues of Dodo IS are resolved in dialogue with the franchisee, but the final word still remains with the management company. According to information from the company, as of January 2020, the number of programmers and developers (Habr, 2020) of Dodo IS was 250 people, this is a significant part for the company of more than 600 restaurants. To summarize, it must be said that the creator of the company. To summarize, it must be said that the creator of the company, Fedor Ovchinnikov, called his brand a cyborg: outside – a pizzeria, but in fact – an IT company.

1.5 Franchise selection criteria specifics

While there has been an increase in a wide variety of interfirm alliances, business format franchising has emerged as a powerful form of collaboration, expanding faster and more vigorously than other forms in international service industries (Doherty and Alexander, 2004; Alon, 2006) and in the hospitality industry in particular (Altinay and Wang, 2006).

There are various approaches to assessing the attractiveness of franchised models. Tomlison (1970) considered the franchise model as a system consisting of six main indicators:

1. Favourable past association
2. Resources
3. Facilities
4. Partner status
5. Forced choice
6. Local identity

Altinay (2006) indicated that for any competitive franchise it is necessary to have the following list of criteria:

1. General background
2. Financial strength
3. Expertise
4. Partner strategy/rationale for partnership
5. How finance project

There are more comprehensive approaches to evaluating the criteria for choosing a franchise. Thus, (Brookes & Altinay, 2011; Doherty, 2009) formed a framework with approaches to assessing a potential franchise; it is presented in Figure 7.

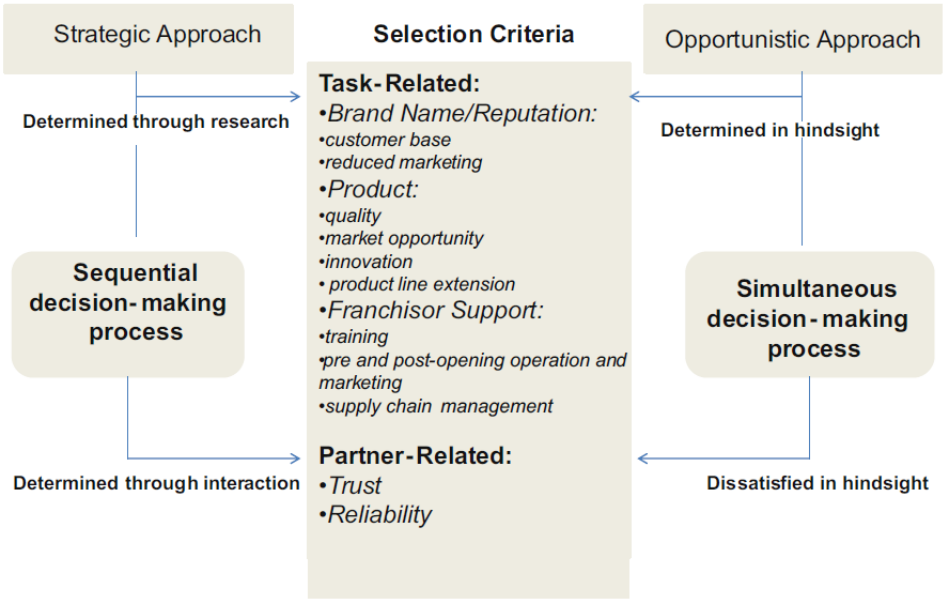

Figure 7 *Selection criteria approach (Brookes & Altinay, 2011; Doherty, 2009)*

From the study it is apparent that the most important criteria are brand name and reputation, a finding consistent with previous franchise studies (Peterson & Dant, 1990; Vaishnav & Altinay, 2009). These are task-related requirements as described in Geringer's (1991) alliance research, as is the training and support found in previous franchise research (Cho, 2004; Withane, 1991) and referred to in this study as the franchisees' institutionalization or professionalism of the franchisor. In addition to the criteria identified for the task, informants also reported that criteria related to partners were important in the selection of franchisor partners. Previous literature has also identified trust as an important criterion for selecting a franchise partner (Brookes & Altinay, 2011; Doherty, 2009). The study findings have shown that trust provides a sense of unity between the franchise partners, contributes to mutual understanding and enhances the spirit of cooperation.

In essence (Brookes & Altinay, 2011) proposed two specific set of parameters, namely task-related and partner-related, that franchisees employ to choose their franchisor partners. Task-related requirements include the franchisor's brand name and credibility, the franchisor's product's quality, form, extension and innovation and the franchisor's support in terms of preparation, promotion, operations and supply chain management. Partner related criteria include the franchiser's trustworthiness and reliability. They also established two approaches to evaluating franchising; strategic and opportunistic in particular. A strategic approach to partner selection involves a sequential research-based decision-making process, and a relatively thorough assessment of both the task and the partner-related criteria is deemed important before a contract agreement is signed.

During the longer decision-making process, partner-related criteria are assessed through interaction with the franchisor, allowing franchisees to make informed decisions about their ability

to trust franchisors. An opportunistic approach, on the other hand, reflects a relatively quick and simultaneous decision-making process with limited or no research being undertaken to assess either task or partner-related criteria prior to signing the contract.

In order to briefly summarize the literature analysis carried out in the previous parts of the work, it is necessary to consolidate approaches to the selection and evaluation of franchised partners. Consolidation is presented in Figure 8 and combines the analysis of theoretical sources and approaches in evaluating franchised offers.

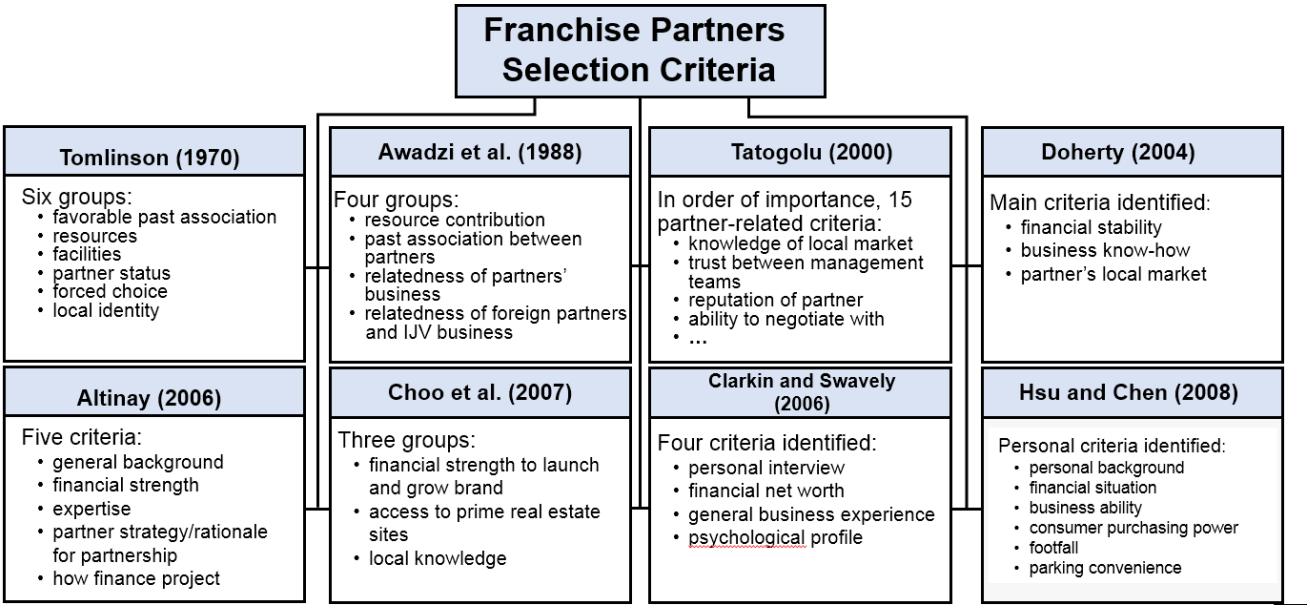

Figure 8 *Franchise Partners Selection Criteria Consolidation (Author, 2020)*

1.6 Hierarchic system of criteria of restaurant franchise assessment

After an analysis of the literature, data obtained from the work of previous researchers, as well as a survey among industry experts (which is described in part 2,3), a hierarchical tree of franchise attractiveness criteria was formed. It consists of six groups of factors. Groups of factors are collected according to a generalized model of franchise partner selection criteria (Levent Altinay, Maureen Brookes, Gurhan Aktas). Indices within groups are compiled from other scientific sources, Figure 8 aggregates all theoretical approaches to partner selection criteria. A general list of the resulting criteria is presented below.

Brand name / Reputation

- Brand age – the total duration of the brand's existence in the market;
- Brand recognition – brand recognition by consumers;
- Size of the existing customer base – the size of the current customer base of consumers;

- Federal advertising campaign – the presence of a federal marketing company in the country or region promoted by the franchisor company;
- The total number of franchisees in the network – the total number of restaurants in the franchisor network in the country.

Franchisor Support

- Training center for franchisees – the presence of a corporate training center for training potential franchisees;
- Franchisee consulting – comprehensive assistance of the franchisee both at the opening stage and operational consulting during the work of restaurants;
- Call-center (for orders) availability – the ability to use the services of a franchisor call center without the need to create a separate call center;
- Adaptable restaurant design project – the ability to quickly calculate a design project for a specific selected location.
- Access to prime real estate sites – help franchisees in the search for real estate and its maintaining corporate database of franchisor objects;
- Local marketing guidelines – a marketing plan for the franchisee, taking into account the characteristics of a particular restaurant, geographic location, and purchasing power of the region.

Scaling conditions

- Geographical accessibility (regions) – franchise availability in various regions of the country;
- Exclusive territory contracts – the ability to conclude a contract for the entire geographical region or territory, without the right to transfer to other franchisees;
- Growth options (subfranchising) – the opportunity to become a partner (sub franchisee) in the region;
- Contract length – the duration of the franchise contract;
- Deferral options – the ability to defer franchise payments (royalties, food costs).

Operation Processes

- Food cost and shrinkage control system – IT analytics systems allowing to track the margin of goods, their costs, as well as analyze shrinkage of products;
- Scheduling, payroll, and shift management automatization – IT systems to optimize staff time, compile work shifts, and payroll;

- Website (unified orders aggregator) – a general site for aggregating orders (no need to create own website and attach a payment system for the franchisee);
- Real-time data analytics system – IT systems that allow analyzing data on sales, revenue growth, margin and profitability of a business in real time; Ability to create OLAP reports and visualize data;
- Overall IT infrastructure – the general level of manufacturability (digitalization of the kitchen, delivery system, processes of acceptance, and distribution of orders).

Quality / Product

- Product-specific quality standards – the existence of network quality standards and monitoring of their compliance;
- Supply chain sustainability – a flexible supply chain that works without fails (the ability to quickly replace missing ingredients through other suppliers);
- The simplicity of operations – the level of simplicity of operational processes (optimization);
- Internal audits – the presence of an internal control system (Mystery Shopper, audit from the franchisor).

Financial Conditions

- Level of investment required – the level of the franchise cost (the cost of the restaurant);
- Royalty rate – the monthly royalty rate;
- Franchise target profitability – the expected return on investment;
- Franchise network growth rate – an index of the growth of new stores to the network;
- Franchise fee – the amount of a lump-sum payment.

The Figure 9 shows the resulting model of factors for assessing the attractiveness of a franchise in the restaurant industry:

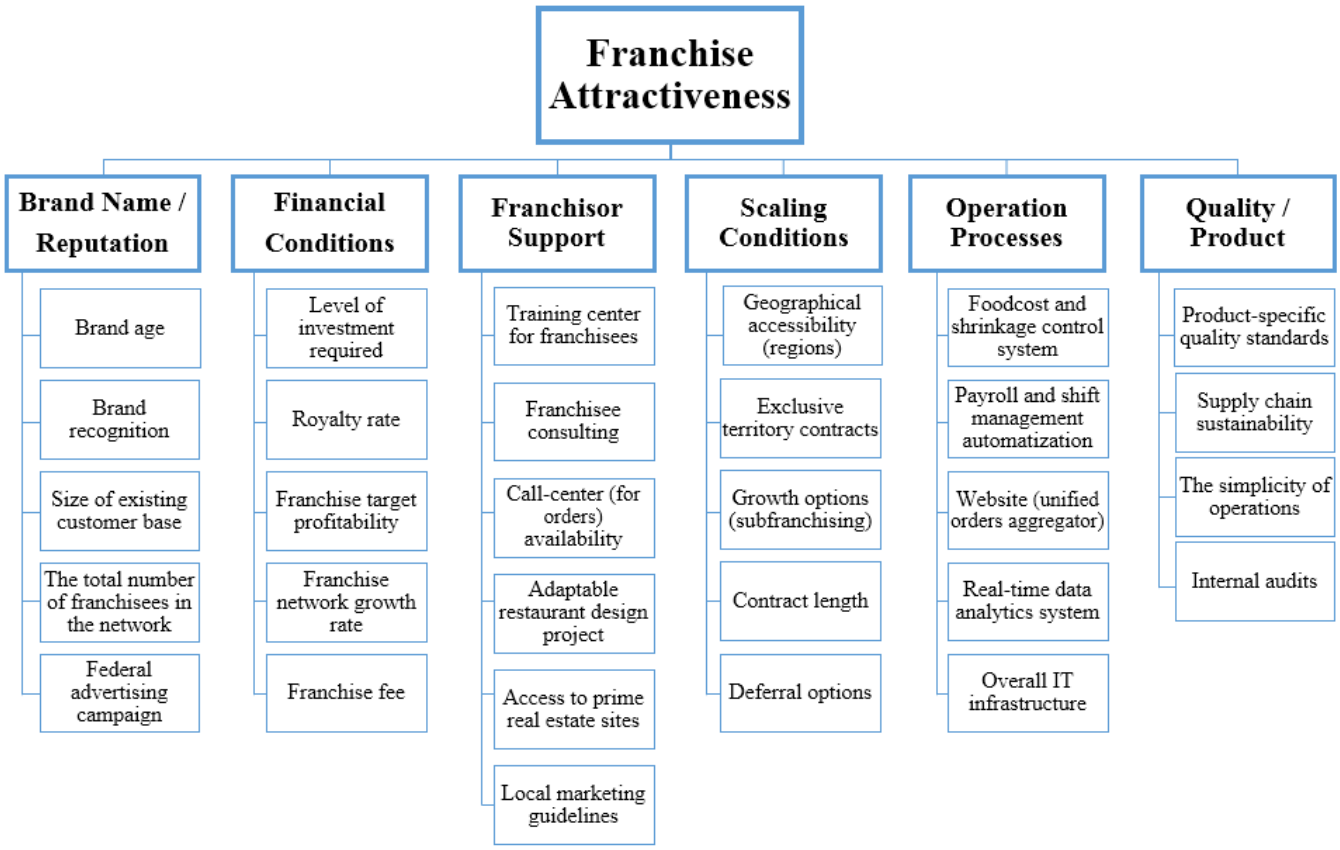

Figure 9 *Hierarchic system of criteria of restaurant franchise assessment (Author, 2020)*

Thus, based on previous studies, a survey of experts and scientific literature, a hierarchical tree of indicators was formed to assess the attractiveness of a franchise in the restaurant industry.

Summary of Chapter 1

The first chapter ends with the formation of a hierarchical tree of criteria, formed on the basis of data from scientific sources and information received from experts in the restaurant industry. This tree will be used in the third chapter of the study to assess the attractiveness models of several franchised companies. At the beginning of the first chapter, the meanings of such terms as franchising, franchisees, franchisors, royalties, brand, service fee and trademark were disclosed. Next, the main models and theoretical concepts of franchising were highlighted, such as classifications by participants, the format of the business environment and the relationships between franchising participants. An analysis was made of the latest trends in franchising the Russian market and the role of digitalization in it. The chapter ends with the formation of a hierarchy tree, which will serve as the basis for discussion in subsequent chapters of the work.

CHAPTER 2. FRANCHISE ATTRACTIVENESS EVALUATION IN RESTAURANT BUSINESS

In this chapter of the paper, the framework for assessing the attractiveness of franchising offers in the restaurant industry will be developed. The main idea is that the future framework will be based on a tree of criteria (AHP) described previously, while the criteria are obtained from scientific literature and a survey of industry experts. In the section 2.1, a general methodology discussion will be given, then, in the second part, a comparative analysis of the methods suitable for the task of evaluating a franchising offer under the conditions of a multiple of criteria and uncertainty of choice will be presented. And then, in the third part, the final framework will be structured and formed.

2.1 Research methodology

As part of the work, a large number of techniques were used to make the research. Below is a list of methods used in chronological order:

- Scientific literature analysis;
- Frameworks and methods analysis used by researches;
- In-depth interview with the HoReCa industry experts;
- Creation of the hierarchy of factors (using AHP);
- Analysis of methods for multi criteria decision making;
- Suitable tool for the quantitative assessment of alternative options selection;
- Importance of criteria assessment (survey among experts);
- Criteria evaluation (survey among experts);
- Framework development;
- Application of the proposed framework on the case restaurant franchises;
- Calculating with APIS software;
- Analysis of the results.

The first step of the research was the analysis of the scientific literature on the topic of franchising both in world and in Russia topics. It was done in order to gather background information on the topic of HoReCa, in restaurant business in particular, to study the business model of franchising in the restaurant business, as well as the mechanisms for implementing franchising activities. In addition, the researcher was faced with the task of exploring the current situation in the franchising market in Russia, as well as the latest trends regarding digitalization and the factors that have had the greatest impact on the market in recent years.

The second step was the study of current research on the evaluation of franchise offers in general, as well as a detailed immersion in the particularities of the restaurant industry. The author studied practical works, which described specific factors important to investors in evaluating franchises. The analysis involved mainly international restaurant practices and existing frameworks, in order to gather the foundation of factors for experts in the further stages of the study.

The third and one of the most important steps were in-depth interviews with experts from the restaurant industry. The importance of this step was that, due to the analysis of the literature, there was an almost complete absence of frameworks and factors for evaluating restaurant franchises. Accordingly, the quality of the future framework depended solely on the quality of the experts surveyed and their level of knowledge. Therefore, strict criteria for interviewed experts were established for the interview. These criteria were:

1. Experience in the restaurant business industry for over 5 years
2. Experience in top management positions
3. Personal franchise ownership in restaurant business
4. Positive financial result of owned franchise

Compliance with these four conditions was the criterion of "expertness" of the respondent. Thus, the following respondents acted as experts:

- Alena Tihova (CEO, Dodo Pizza USA)
- Bogdan Lomako (COO, Cofix, Moscow)
- Michail Airapetov (Franchising director, Pizza Hut, Moscow)
- Alexandra Izvekova (Mark. Director, Burger King, Kazan)

Thus, with in-depth interviews conducted among experts, additional factors were identified for choosing a franchise in the restaurant industry, as well as the frameworks of previous researchers were verified.

The hierarchical system of criteria was formulated on the basis of the first three stages of the research process and it is presented in Section 1.6. The hierarchy tree was formed on the basis of an analysis of the literature and the work of previous researchers, as well as taking into account industry characteristics obtained from experts. Following the development of the hierarchical system of indicators, it was identified that the problem of franchising assessment in nature is multi-criteria and requires a multi-criteria decision-making method for solving it. The next step of the research procedure was the review of the decision-making processes with different parameters. This stage is set out in Section 2.2. The most appropriate approach was selected at the end of

section 2.2 after studying the advantages and drawbacks of most widely used multi-criteria decision making methods.

After the APIS was chosen as a method of analyzing the information, the data needed for the successful application of the method was collected, more precise information on the weight coefficients and the information on the value of the criteria were required. Information about weight coefficients and relative weight of factors was collected with the questionnaire of industry experts. The survey is presented in more detail in Appendix 2, the survey was completed by nine restaurant industry experts, among whom were: Ilya Bazarsky (Owner, Bekitser, Saint Petersburg), Alena Tihova (CEO, Dodo Pizza USA), Bogdan Lomako (COO, Cofix, Moscow), Michail Airapetov (Franchising director, Pizza Hut, Moscow), Alexandra Izvekova (Mark. Director, Burger King, Kazan), three restaurant consultants from LEMMA HoReCa consulting, anonymous expert from Bushe franchising department and anonymous expert from Ginza restaurant group. Experts were asked to distribute 100 points among six groups of indicators within a hierarchical tree. Then, within each group, experts had to put down the importance of each factor for a potential franchise offer from one to seven on the Likert scale, where the scale looked like:

1. Not at all important
2. Low importance
3. Slightly important
4. Neutral
5. Moderately important
6. Very important
7. Extremely important

The Likert scale was chosen because in conditions of multiple parameters, it is easier for experts to weigh each parameter separately from 1 to 7 than to distribute points between several different parameters. Likert Scales have the advantage that they do not expect a simple yes / no answer from the respondent (Jamieson, S., 2004), but rather allow for degrees of opinion, and even no opinion at all. In addition, the researcher was faced with the task of determining the level of influence of digitalization on each factor within the resulting hierarchical tree. Thus, the survey included questions on the level of penetration of IT into each factor of the model, the following options could be the answer:

- None
- Low
- Medium
- High

The results obtained can be seen in part 2.3 of this study.After evaluating the criteria by experts, it is necessary to evaluate the weight of their votes. Eckenrode (1965) proposed the formula for this:

$$w_{cj} = p_{cj} \sum_{c=1}^{m} p_{cj}$$

Where w_{cj} – computed weight for the criterion c from the ranking given by the judge j, and p_{cj} – rating by judge j to criterion c, w_c – weight of the criterion c.

The next step in the work was the development of a framework for evaluating a franchise offer; it is described in detail in part 2.2 of this study.

After obtaining all the necessary information and averaging the expert rating according to the formula proposed by Eckenrode, APIS software on was used to evaluate the hierarchical system of the factors obtained. The resulting framework was tested on the example of four companies in the restaurant sector with a franchising offer on the Russian market. These companies are the franchises of Dodo Pizza, Cofix, Dominos and Burger King. The last step of the study was the analysis of the results, the formation of recommendations on the strengths and weaknesses of specific franchises, as well as conclusions about the possible use of the resulting framework for the analysis of other companies within the industry.

2.2 Methods for multi criteria selection of alternatives

Evaluation of franchise attractiveness indicators is a Multiple Criteria Decision making (MCDM) problem, as attractiveness is described with a multiple and sometimes conflicting criteria (like customer satisfaction, quality of food, cleanness in the restaurants, brand recognition and etc). The goal of this evaluation is to choose the best performing company among multiple alternatives. Under normal circumstances, choosing and ranking franchise criteria is a rather difficult task.

The decision to choose the best franchise is seen by the buyer as a potential investment and is a long-term choice that requires accuracy and several checks. To simplify the choice, there are various ratings of franchises, such as the site "franshiza.ru", but their approach to assessment is quite subjective and not standardized. This suggests that there are MCDM techniques to simplify the selection of the most attractive franchise. Multi criteria decision making is so complex, that human cannot be replaced by a computer due to the high level of uncertainty. Techniques for MCDM were developed in order to make a decision-making process more structured and efficient (Stewart, 1992).

As mentioned earlier, the assessment of a particular franchise in the restaurant industry includes the need to weigh many different uncertainties and parameters. As well as an assessment of various factors, which are rather difficult to express in numerical format. These factors can be the absence or presence of any franchise parameters (the possibility of scaling, sub-franchising conditions, the availability of a training center for franchisee training), and exclusively quantitative metrics (lump-sum contribution, percentage of royalties and expected franchise payback level). Therefore, the decision-making methods under consideration should include the ability to evaluate all of these factors. And in the end result, the target decision-making method should have the ability to simply compare the results between different franchises. Thus, the following is a description of the main methods that can help in solving the problem of assessing the attractiveness of a franchise.

Table 4 Comparison of multi-criteria decision-making methods (Velasques & Hester)

Method	Advantages	Disadvantages	Areas of Application
Case-Based Reasoning (CBR)	Not data intensive; requires little maintenance; can improve over time; can adapt to changes in environment.	Sensitive to inconsistent data; requires many cases.	Businesses, vehicle insurance, medicine, and engineering design.
Analytic Hierarchy Process (AHP)	Easy to use; scalable; hierarchical structure can easily adjust to fit many sized problems; not data intensive.	Problems due to interdependence between criteria and alternatives; can lead to inconsistencies between judgment and ranking criteria; rank reversal.	Performance-type problems, resource management, corporate policy and strategy, public policy, political strategy, and planning.
Fuzzy Set Theory	Allows for imprecise input; takes into account insufficient information.	Difficult to develop; can require numerous simulations before use.	Engineering, economics, environmental, social, medical, and management.
Simple Multi-Attribute Rating Technique (SMART)	Simple; allows for any type of weight assignment technique; less effort by decision makers.	Procedure may not be convenient considering the framework.	Environmental, construction, transportation and logistics, military, manufacturing and assembly problems.

Table 4 Comparison of multi-criteria decision-making methods (continuation)

Method	Advantages	Disadvantages	Areas of Application
Technique for Order Preferences by Similarity to Ideal Solutions (TOPSIS)	Has a simple process; easy to use and program; the number of steps remains the same regardless of the number of attributes.	Its use of Euclidean Distance does not consider the correlation of attributes; difficult to weight and keep consistency of judgment.	Supply chain management and logistics, engineering, manufacturing systems, business and marketing, environmental, human resources, and water resources management.
ELECTRE	Takes uncertainty and vagueness into account.	Its process and outcome can be difficult to explain in layman's terms; outranking causes the strengths and weaknesses of the alternatives to not be directly identified.	Energy, economics, environmental, water management, and transportation problems.
PROMETHEE	Easy to use; does not require assumption that criteria are proportionate.	Does not provide a clear method by which to assign weights.	Environmental, hydrology, water management, business and finance, chemistry, logistics and transportation, manufacturing and assembly, energy, agriculture.
Simple Additive Weighting (SAW)	Ability to compensate among criteria; intuitive to decision makers; calculation is simple does not require complex computer programs.	Estimates revealed do not always reflect the real situation; result obtained may not be logical.	Water management, business, and financial management.
Aggregated indices method (AIM)	Ability to cope with poor-quality input information. It can use non-numeric (ordinal), non-exact (interval) and non-complete expert information.	Necessity to prepare hierarchical structure of indicators. The uncertainty consisting in the fact that all the indicated components of the method of summary indicators are specified up to the corresponding set of possible options (mitigated using randomization).	Crucial managerial decisions of high level, Multi-criteria choice of alternatives under shortage of information about criteria priorities, revelation of decision-making person priorities, estimation of projects.

There are 3 methods applicable to evaluation problems related to franchise assessment, among them are: Data Envelopment Analysis (DEA), Simple Multi-Attribute Rating Technique and Aggregated indices method (AIM). First two of them have particular disadvantages in the application of franchising: they are both sensitive to mutual interdependence of criteria. Disadvantages of AIM are related to uncertainty, which can be overcome by making the minor changes in the method called AIRM, resulting from the fixed set of options. AIM method was developed by (A.N. Krylov) for comparison of the projects. This method unites the information about importance of the project characteristics and values of the characteristics itself. Thus AIRM method is chosen for quantitative evaluation of hierarchical fracture of factors. This method can be implemented by using APIS software with the guide, created by Hovanov (2008). Therefore, APIS was chosen as an evaluation system for decision making for the following reasons:

- Support of crucial managerial decisions of high level under shortage of numerical information;
- Multi-criteria choice of alternatives under shortage of information about decision criteria priorities;
- Synthesis of a collective opinion of an expert committee, and revelation of experts' priorities;
- Construction of hierarchical systems of decision-making (of complex multilevel objects' estimation);
- Alternatives probabilities estimation by uncertain data obtained from sources of different reliability.

In our case, this is the best tool allowing to evaluate the franchise offer for a whole list of parameters.

2.3 Framework of franchise assessment

The developed structure for evaluating the attractiveness of a franchise is a series of stages presented in Figure 10. Consistent implementation of six stages allows to conduct a comprehensive assessment of the attractiveness of a particular franchise, identify strong indicators, and develop an approach to improving lagging indicators.

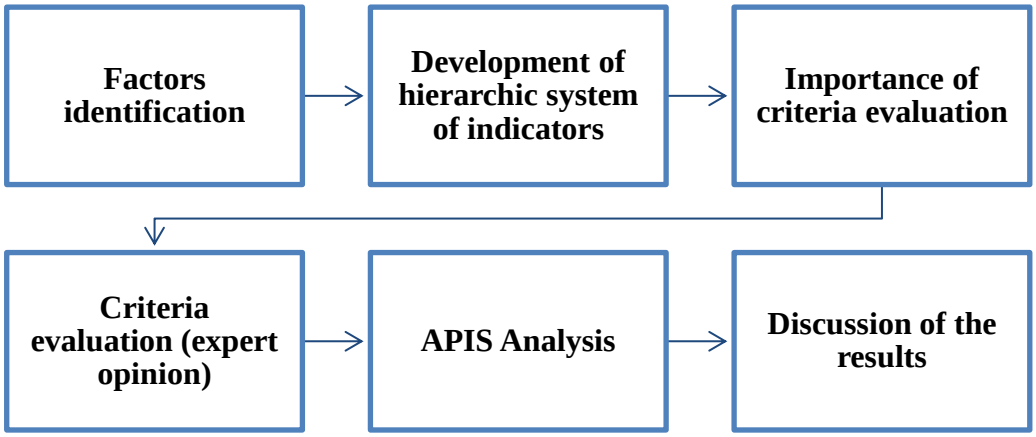

Figure 10 *Framework of franchise assessment*

Thus, the first step is the longest and most time consuming of all the stages of the framework. It requires obtaining of various data from literary sources, and if the industry is new or the analysis being carried out concerns a specific industry, it will be necessary to obtain data from industry experts or consultants. In our case, to study the restaurant industry, we had to resort to the help of both franchise owners and restaurant consultants.

The second stage requires the consolidation of the obtained factors in a hierarchical tree. There are many examples of factors in the literature that are also hierarchically structured. This is a natural structure for such models, because many different variables affect larger variables and form groups. A good example can be the royalty rate, franchise fee, level of required investments that can be included in the group of financial factors.

It is important to evaluate the criteria, as this will improve the accuracy of quantitative analysis in APIS. Questionnaire for experts was created based on the APIS software manual recommendations and works of previous students who used this tool. In addition, the survey examined the role of digitalization in factors influencing franchising attractiveness.

The first section of the survey generated the following results: all criteria were evaluated using the 1 to 7 Likert scale. Then, the importance rated among all the experts was averaged. The estimated weight was then determined using the equation as follows:

$$w_c = p_c \sum_{c=1}^{m} p_c$$

Where w_c – weight computed for the criterion c, and p_c – average rating of importance given to the criterion c.

Thus, the results of the expert survey were calculated, the table with the results is presented below, and detailed answers of each expert can be seen in Appendix 1 of this study. Results were

visually formatted for easier reading. Green is the larger weight of the criterion, red is the smaller weight of the criterion.

Table 5 Criteria importance weight and IT impact based on average ratings

Brand name / Reputation	Brand age	Brand recognition	Size of existing customer base	Federal advertising campaign	The total number of franchisees in the network	
	12,02%	**26,78%**	**19,13%**	**19,67%**	**22,40%**	
IT impact	**No**	**No**	**No**	**Low**	**No**	
Franchisor Support	Training center for franchisees	Franchisee consulting	Call-center (for orders) availability	Adaptable restaurant design project	Access to prime real estate sites	Local marketing guidelines
	18,78%	**26,40%**	**13,71%**	**11,68%**	**11,17%**	**18,27%**
IT impact	**Low**	**High**	**Medium**	**High**	**Low**	**Medium**
Scaling conditions	Geographical accessibility (regions)	Exclusive territory contracts	Growth options (subfranchising)	Contract length	Deferral options	
	33,33%	**18,37%**	**18,37%**	**14,29%**	**15,65%**	
IT impact	**Low**	**No**	**Medium**	**No**	**No**	
Operation Processes	Foodcost and shrinkage control system	Scheduling, payroll and shift management automatization	Website (unified orders aggregator)	Real-time data analytics system	Overall IT infrastructure	
	17,13%	**20,83%**	**13,43%**	**24,54%**	**24,07%**	
IT impact	**High**	**High**	**Medium**	**High**	**High**	
Quality / Product	Product-specific quality standards	Supply chain sustainability	The simplicity of operations	Internal audits		
	30,22%	**31,65%**	**21,58%**	**16,55%**		
IT impact	**Low**	**Medium**	**High**	**Medium**		
Financial Conditions	Level of investment required	Royalty rate	Franchise target profitability	Franchise network growth rate	Franchise fee	
	23,18%	**19,74%**	**23,61%**	**18,03%**	**15,45%**	
IT impact	**No**	**No**	**No**	**No**	**No**	

The experts were also asked to distribute 100 points between six groups of indicators in order to find out which groups of indicators are more important for a potential investor and which are less important. Below are the results.

Table 6 Weights of the groups of factors in the model

Brand name / Reputation	**18,3%**
Franchisor Support	**17,6%**
Scaling conditions	**11,4%**
Operation Processes	**16,1%**
Quality / Product	**14,2%**
Financial Conditions	**22,3%**

A quantitative part of the study was carried out in the APIS program, for a general understanding, a screenshot of the program interface is presented below, however, a detailed analysis is presented in the third chapter of this study.

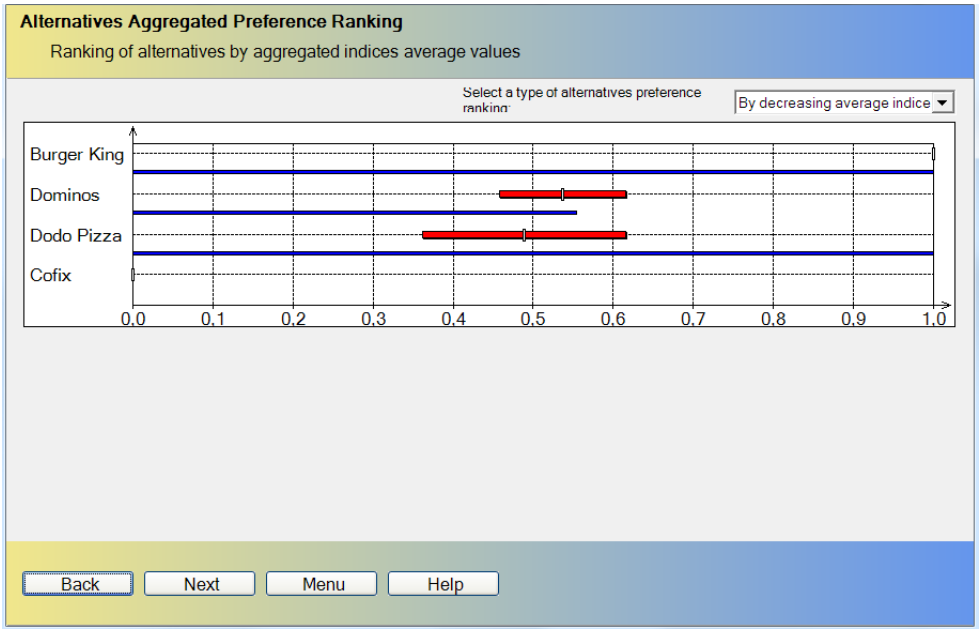

Figure 11 *Example of results of APIS software calculation*

The results in the figure can be interpreted as follows: Burger King is the leader in the rating, gaining 1 point on the APIS scale, followed by Dominos with the larger confidence interval, then Dodo with the highest confidence interval and closes Cofix with a score of zero. Thus, the resulting framework allows to visualize the received data and reduce the analysis of several franchises with a huge number of parameters to the final rating.

Thus, a similar framework can be used to evaluate franchising models in retail, healthcare, the services market, and even in manufacturing. To do this, just the factors included in the hierarchical model need to be updated. In order to do this, data from theoretical sources can be collected, as well as check with experts the latest industry trends. However, researchers should remember that this method is based on highly expertise of people who evaluate the parameters for

the APIS model, so the researchers need to carefully select the pool of experts to evaluate a particular industry.

Summary of Chapter 2

In the second chapter, the author identified the research methodology of the current paper, compared the methods possibly relevant for the solution of the problem of multiple-criteria decision making and chose the most suitable method. The existing data analysis methods under several criteria and uncertainty were investigated and the most suitable method of data analysis was selected. Thus, the method chosen was APIS (Aggregated Preference Indices Method). In the last section of the second chapter, the developed framework is presented and described. The developed framework is a tool for assessing the attractiveness of franchises in the restaurant industry. Its use will be considered in the last chapter of this research on the example of the four most specific networks in the restaurant franchising market in Russia.

CHAPTER 3. APPLICATION OF THE FRAMEWORK TO THE CASE RESTAURANT FRANCHISES

3.1. Market overview

Currently, there is a franchise boom in Russia that provides good opportunities for both Russian and foreign companies. Of the franchised offerings in Russia that are presented (retail.ru) on the market, 76% are Russian, and 24% are American and European. Today in Russia there are more than 2,800 franchisors – manufacturers of goods and services, and about 74,000 franchisees who have the right to use the brand. According to a large-scale study (Franhiza.ru), 2019 was very active in terms of the emergence of new franchisors. These are mainly regional young projects, especially in restaurant business. There were official suspensions of franchising programs in a significant number of networks. Therefore, by the end of the year, taking into account exits and withdrawals, the franchising market grew by 16%. (for comparison, at the beginning of 2019, the market showed a record growth of 19%, and in 2017 – only 5%).

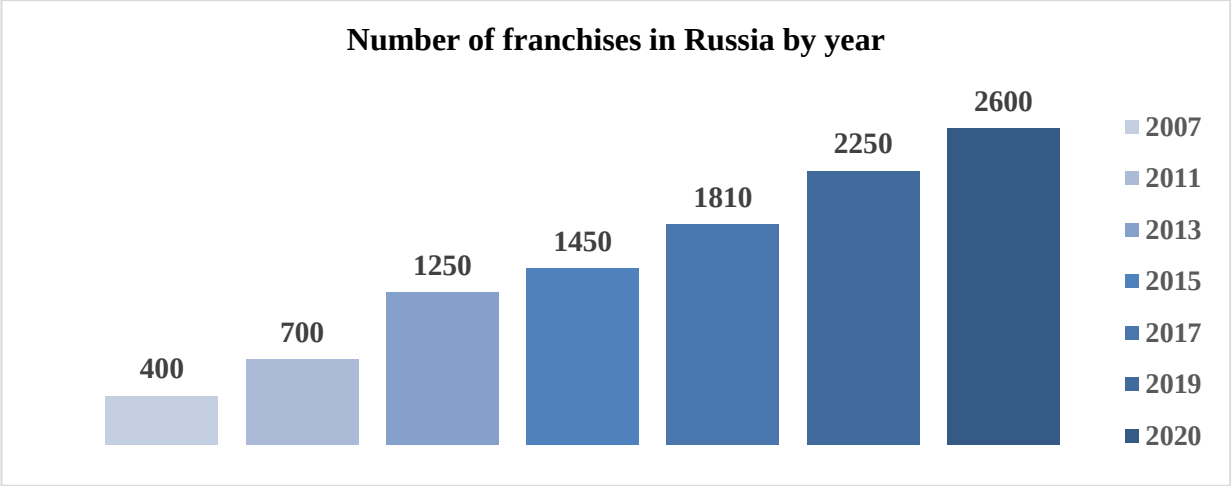

Figure 12 *Number of franchises in Russia, 2007-2020*

About 48% of Russian franchisors actively developing franchises already have franchised network branches outside the Russian Federation. In most cases, this development is in neighboring countries – Belarus, Kazakhstan, Uzbekistan, etc. Russian franchises entered the markets of Europe, the Middle East and Asia. The most dynamic segments of the last few years are the restaurant and service sectors. The catering segment is growing mainly due to the concepts of fast food. The retail segment feels more difficult, which in 1.5 years fell from 33% to 22%.

The most widespread sales and purchases of franchises are in the central regions of the country, mainly Moscow and St. Petersburg. However, in recent years there has been a spread of franchising in other regions, such as Omsk, Irkutsk, Perm, Vladivostok, Novosibirsk and

Yekaterinburg. Thanks to this, the relevance of franchising in Russia is increasing every day. For further full-fledged development, Russian franchising needs full and reliable statistics on franchises on the market. There is practically no information about the quality of at least a third of the concept, confirmed by the successful and long-term activity of the franchisee. Market experts have also repeatedly drawn and continue to pay attention to the existence of frankly "fake" franchises (Vc.com). The lack of clear criteria that the franchisor must meet when inviting other entrepreneurs to invest their money, strength and energy in their concept harms everyone without exception the market participants. This problem concerns the entire franchise market and in particular the restaurant industry due to its rapid growth in recent years.

3.2 Case companies' description

The restaurant franchising market is characterized by an abundance of offers in fast casual and fast food format. Historically, restaurant chains of this format are better at scaling and show better economic results and adaptability when used in different geographical regions. As the typical examples of such franchises, the four largest franchising networks in the Russian Federation were selected with the possibility of open entry (without the absence of tight boundaries when investing). The author originally planned to add the well-known McDonalds network to the list of case companies, however, after studying the requirements and conditions of franchising, it was found that McDonalds has very specific scaling conditions and is not suitable for a potential investor. Moreover, the case of the company should have been quite well-known, so that experts could evaluate them according to one or another of the framework's parameters. Thus, the following companies were selected for the final analysis:

- Dodo Pizza
- Burger King
- Dominos
- Cofix

The main idea was that the above players represent partially different segments of the industry and have different business models and, accordingly, products.

Dodo Pizza is a Russian pizza chain of fast food restaurants. As of November 2019, the network includes 602 institutions in 13 countries, including Russia, the USA, China and European countries. By the spring of 2012, the company consolidated all work processes and the first franchisees appeared. The basis of the Dodo Pizza franchise was the cloud-based ERP system Dodo IS, which coordinates all processes in a pizzeria: orders, kitchen work, delivery, advertising, and general management. At the moment, this is the fastest growing franchise network in Russia.

Burger King is an American company, the owner of a global chain of fast food restaurants Burger King, specializing in hamburgers. In Russia Burger King works through a franchising system. At the moment, Burger King in Russia has a master franchisee represented by «BURGER RUS LLC», a joint company of Burger King Europe.

Domino's Pizza is an American catering company. Manages the world's largest chain of pizzerias (in terms of revenue; Pizza Hut is inferior in the number of restaurants). The network, represented in 85 countries and including 15,900 restaurants, sells more than 3 million pizzas a day. The company owns 390 restaurants in the United States, the rest operate on franchising. Sales of Domino's Pizza Russia in 2018 compared with 2017 increased by 49% from 3,304.2 million rubles to 4,913.7 million rubles.

Cofix is an Israeli coffee shop, bar and supermarket chain established in 2013 by Avi Katz, which uses a fixed price menu system. Most Cofix branches are in city centers, and other popular areas, but some are located in or next to educational institutions. The chain sells fresh coffee at a fixed and low price, as well as associated food products, under the slogan "fresh coffee, fixed price". Cofix operates both directly and through franchisees. With the help of Russian investors, Cofix opened its first store in Moscow near the Red Square in October 2016. By late 2019 the chain had 96 stores in Moscow, and ten in Saint Petersburg.

3.3 Framework application stage by stage

Using the example of these four companies, an analysis of the resulting framework will be performed. The calculations were carried out in several stages. We asked experts in the field of restaurant franchising to evaluate aggregated preference indices of the first level of the factors hierarchy tree. Thus, they rated the groups of factors:

- Brand name / Reputation
- Franchisor Support
- Scaling Conditions
- Operation Processes
- Quality / Product
- Financial Conditions

The obtained values are presented in Table 7

Table 7 Criteria values (Author, 2020)

Questionaire results : Companies analysis	Dodo Pizza	Burger King	Domino's	Cofix
Brand name / Reputation				
Brand age	3	7	6	3
Brand recognition	4,2	6	5	3
Size of existing customer base	5	6	4,2	2,1
Federal advertising campaign	5,25	7	4	3
The total number of franchisees in the network	6	7	5	3,15
Franchisor Support				
Training center for franchisees	7	5	4	3
Franchisee consulting	6,3	5	4,2	3
Call-center (for orders) availability	7	6,3	6	5,25
Adaptable restaurant design project	6,3	7	7	6
Access to prime real estate sites	4	7	5,25	4
Local marketing guidelines	6	4	5	6
Scaling Conditions				
Geographical accessibility (regions)	7	5	3,15	3
Exclusive territory contracts	6	3,15	4	3
Growth options (subfranchising)	4,2	6	6	4
Contract length	5	6	5	5,25
Deferral options	3	5	4	6
Operation Processes				
Foodcost and shrinkage control system	6	6	5	4
Scheduling, payroll and shift management automatization	6	6,3	5	6,3
Website (unified orders aggregator)	7	7	5	6
Real-time data analytics system	6,3	5	4	5,25
Overall IT infrastructure	7	6	3	4
Quality / Product				
Product-specific quality standards	5	7	4	5,25
Supply chain sustainability	5,25	7	6,3	6
The simplicity of operations	7	6	6	7
Internal audits	7	7	6	5
Financial Conditions				
Level of investment required	7	5,25	6	7
Royalty rate	7	5	4	6
Franchise target profitability	6,3	6	3,15	4
Franchise network growth rate	7	5	4	3,15
Franchise fee	6	2	5	5

The values presented on Appendix 1 have been provided by the researcher through a survey of 9 experts. It presents the relative importance of each of the criteria estimated by each of the respondents, as well as the mean value of each of the criteria.

At the first step the «Brand name / Reputation» characteristic was evaluated, including all the relative weights information gathered by the survey. The following relationships were set:

w (Brand recognition) > w (The total number of franchisees in the network)

w (The total number of franchisees in the network) > w (Size of existing customer base)

w (Size of existing customer base) = w (Federal advertising campaign)

w (Brand age) < w (Federal advertising campaign)

After the relative weight of criteria information has been provided, APIS software calculated the following aggregated preference indices for "Brand name / Reputation", presented in Figure 13.

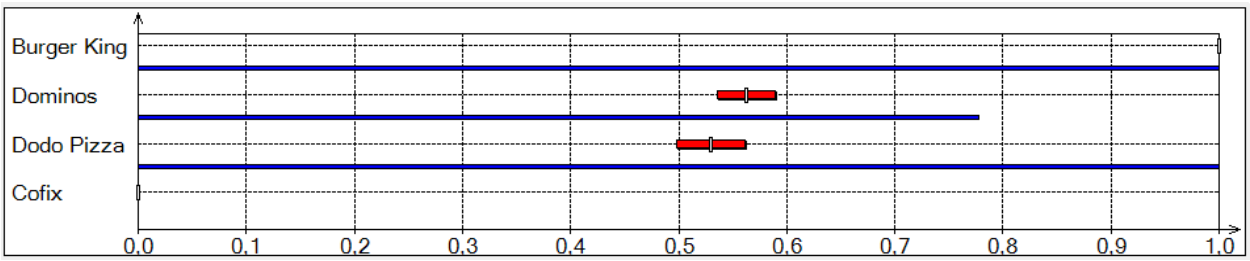

Figure 13 *Aggregated preference indices visualization for "Brand name / Reputation"*

Table 8 Aggregated preference indices for "Brand name / Reputation"

	Dodo Pizza	**Burger King**	**Domino's**	**Cofix**
Index	0,530	1,000	0,563	0,000
Rank	**3**	**1**	**2**	**4**
St Dev	0,032	0,000	0,027	0,000

As we can see, Burger King scored the highest according to the "Brand name / Reputation" criterion, his result was interpreted by the program as close to one, followed by Dominos, Dodo Pizza and finished by Cofix with the lowest rating. To understand what factors influenced these results, we suggest to familiarize with weight-coefficients estimations visualization and statistics of admissible weight-coefficient values, presented below in Figures 14 and Figure 15.

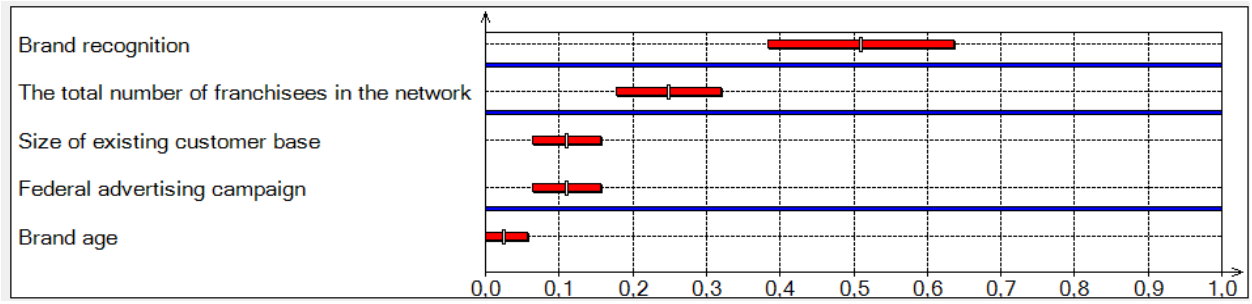

Figure 14 *Weight-coefficients estimations visualization for "Brand name / Reputation"*

Weight of index	Min	Max	Mean	StDev	Rank
w(Brand age)	0,0000	0,1000	0,0241	0,0315	4
w(Brand recognition)	0,3000	0,8000	0,5093	0,1262	1
w(Size of existing customer base)	0,0500	0,2000	0,1093	0,0452	3
w(Federal advertising campaign)	0,0500	0,2000	0,1093	0,0452	3
w(The total number of franchisees in the network)	0,1000	0,4000	0,2481	0,0700	2

Figure 15 *Statistics of admissible weight-coefficients values for "Brand name / Reputation"*

The second step was to calculate the indices for “Franchisor Support” characteristic. This was done using the information gathered in the survey on the relative importance on criteria. The following rules were set:

w (Franchisee consulting) > w (Training center for franchisees)

w (Training center for franchisees) > w (Local marketing guidelines)

w (Local marketing guidelines) > w (Call-center (for orders) availability)

w (Call-center (for orders) availability) > w (Adaptable restaurant design project)

w (Access to prime real estate sites) < w (Adaptable restaurant design project)

Figure 16 shows the ranking of the alternatives received, “Dodo” takes first place, followed by Burger King, then Dominos and closes the list of Cofix. Table 9 shows the numerical rating values for each restaurant analyzed by the “Franchisor Support” criterion.

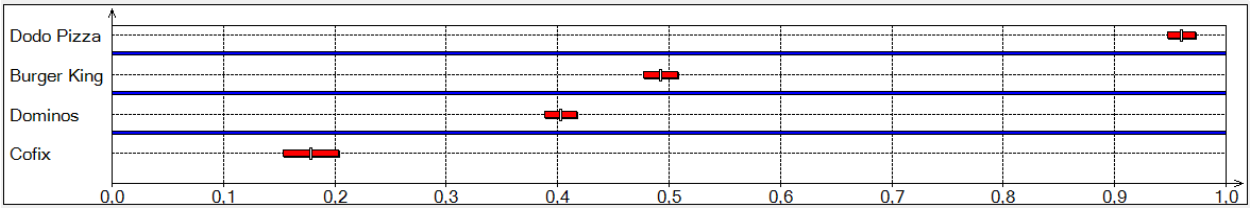

Figure 16 *Aggregated preference indices visualization for "Franchisor Support”*

Table 9 Aggregated preference indices for "Franchisor Support"

	Dodo Pizza	Burger King	Domino's	Cofix
Index	0,960	0,492	0,403	0,179
Rank	**1**	**2**	**3**	**4**
St Dev	0,012	0,015	0,014	0,025

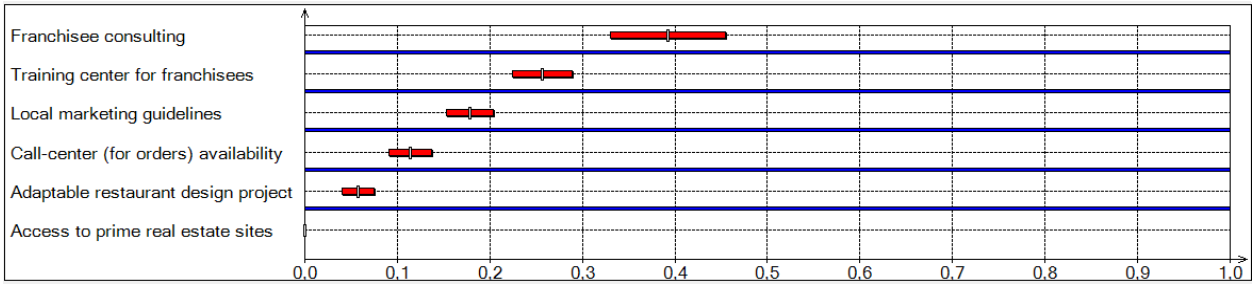

Figure 17 *Weight-coefficients estimations visualization for "Franchisor Support"*

Weight of index	Min	Max	Mean	StDev	Rank
w(Training center for franchisees)	0,2000	0,3000	0,2571	0,0319	2
w(Franchisee consulting)	0,3000	0,5000	0,3929	0,0623	1
w(Call-center (for orders) availability)	0,1000	0,1500	0,1143	0,0226	4
w(Adaptable restaurant design project)	0,0500	0,1000	0,0571	0,0175	5
w(Access to prime real estate sites)	0,0000	0,0000	0,0000	0,0000	6
w(Local marketing guidelines)	0,1500	0,2000	0,1786	0,0247	3

Figure 18 *Statistics of admissible weight-coefficients values for "Franchisor Support"*

The third step was the assessment of the Scaling conditions indicator, as already mentioned, the assessment was made taking into account the importance of the criteria based on data received from experts. The following rules have been established:

w (Geographical accessibility (regions)) > w (Exclusive territory contracts)

w (Exclusive territory contracts) = w (Growth options (subfranchising))

w (Growth options (subfranchising)) > w (Deferral options)

w (Contract length) < w (Deferral options)

The results of evaluating companies according to these criteria can be seen in Figure 19. According to the data received, "Dodo pizza" with the highest standard deviation coefficient leads, followed by "Burger King", then "Dominos" and closes the "Cofix" list. Table 10 shows the numerical rating values of each restaurant analyzed by the "Scaling conditions" criterion.

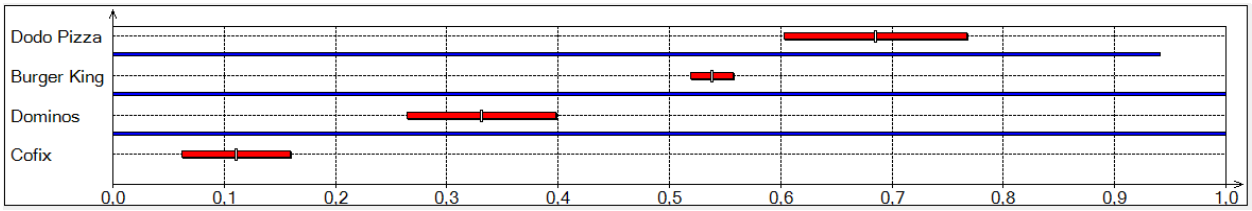

Figure 19 *Aggregated preference indices visualization for «Scaling conditions»*

Table 10 Aggregated preference indices for «Scaling conditions»

	Dodo Pizza	Burger King	Domino's	Cofix
Index	0,686	0,538	0,331	0,111
Rank	**1**	**2**	**3**	**4**
St Dev	0,082	0,019	0,066	0,048

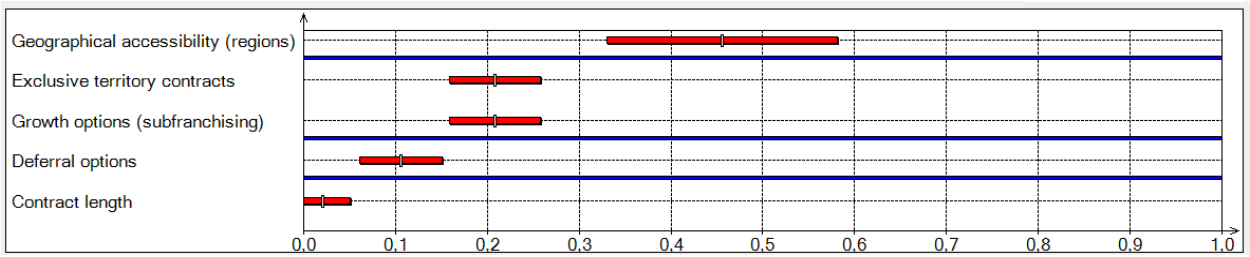

Figure 20 *Weight-coefficients estimations visualization for «Scaling conditions»*

Weight of index	Min	Max	Mean	StDev	Rank
w(Geographical accessibility (regions))	0,3000	0,7500	0,4559	0,1247	1
w(Exclusive territory contracts)	0,1000	0,3000	0,2088	0,0492	2
w(Growth options (subfranchising))	0,1000	0,3000	0,2088	0,0492	2
w(Contract length)	0,0000	0,1000	0,0206	0,0300	4
w(Deferral options)	0,0500	0,2000	0,1059	0,0450	3

Figure 21 *Statistics of admissible weight-coefficients values for "Franchisor Support"*

Next, the "Operation Processes" indicator was evaluated, and the following calculation conditions were established during the assessment:

w (Real-time data analytics system) > w (Overall IT infrastructure)

w (Overall IT infrastructure) > w (Scheduling, payroll and shift management automatization)

w(Scheduling, payroll and shift management automatization) > w (Foodcost and shrinkage control system)

w (Website (unified orders aggregator)) < w (Foodcost and shrinkage control system)

As can be seen from Figure 22, the first place is taken by “Dodo”, followed by “Burger King”, then “Cofix” and closes the list “Dominos”, Table 11 shows the numerical rating values of each restaurant, analyzed by the criterion of “Scaling conditions”.

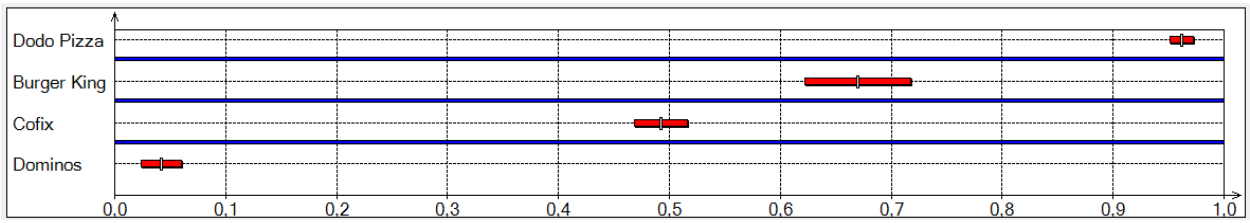

Figure 22 *Aggregated preference indices visualization for «Operation Processes»*

Table 11 Aggregated preference indices for «Operation Processes»

	Dodo Pizza	Burger King	Domino’s	Cofix
Index	0,962	0,669	0,042	0,492
Rank	**1**	**2**	**4**	**3**
St Dev	0,010	0,047	0,017	0,023

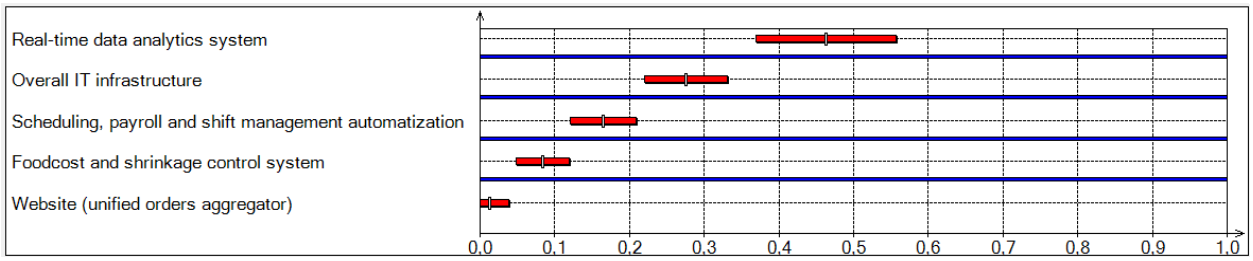

Figure 23 *Weight-coefficients estimations visualization for «Operation Processes»*

Weight of index	Min	Max	Mean	StDev	Rank
w(Foodcost and shrinkage control system)	0,0500	0,1500	0,0833	0,0350	4
w(Scheduling, payroll and shift management automatization)	0,1000	0,2500	0,1650	0,0431	3
w(Website (unified orders aggregator))	0,0000	0,1000	0,0133	0,0256	5
w(Real-time data analytics system)	0,3000	0,7000	0,4633	0,0939	1
w(Overall IT infrastructure)	0,1500	0,4000	0,2750	0,0544	2

Figure 24 *Statistics of admissible weight-coefficients values for «Operation Processes»*

The next indicator on the list was Quality / Product. The following formation rules were set:

- w (Supply chain sustainability) > w (Product-specific quality standards)
- w (Product-specific quality standards) > w (The simplicity of operations)
- w (Internal audits) < w (The simplicity of operations)

Figure 25 clearly shows that Burger King leads in «Quality / Product» indicator, followed by Cofix by a large margin and closes the list of Dominos and Dodo Pizza. Table 12 shows the numerical rating values for each restaurant analyzed by the Quality / Product criterion.

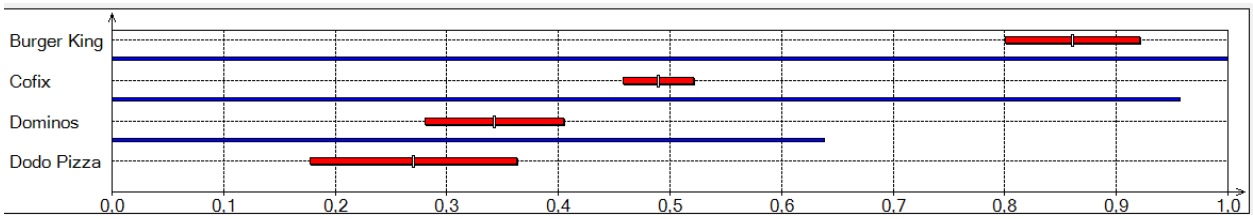

Figure 25 *Aggregated preference indices visualization for « Quality / Product»*

Table 12 Aggregated preference indices for « Quality / Product»

	Dodo Pizza	Burger King	Domino's	Cofix
Index	0,270	0,861	0,342	0,489
Rank	**4**	**1**	**3**	**2**
St Dev	0,092	0,060	0,062	0,031

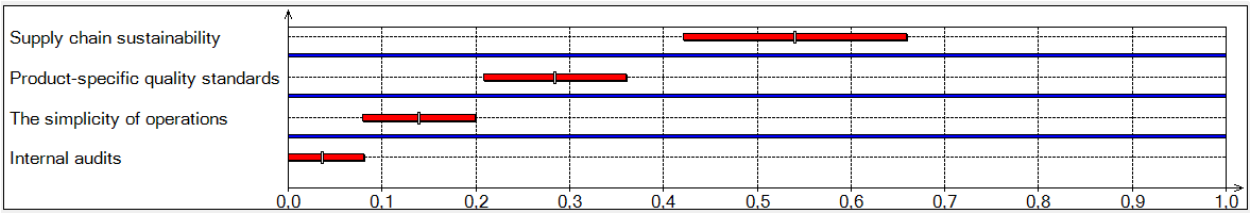

Figure 26 *Weight-coefficients estimations visualization for « Quality / Product»*

Weight of index	Min	Max	Mean	StDev	Rank
w(Product-specific quality standards)	0,1000	0,4500	0,2840	0,0752	2
w(Supply chain sustainability)	0,3500	0,8500	0,5404	0,1188	1
w(The simplicity of operations)	0,0500	0,2500	0,1394	0,0601	3
w(Internal audits)	0,0000	0,1500	0,0362	0,0434	4

Figure 27 *Statistics of admissible weight-coefficients values for « Quality / Product»*

The last group of analysis factors was "Financial Conditions". According to experts, financial factors are most preferable when choosing a particular franchise. The following conditions within the group have been established:

w (Franchise target profitability) > w (Level of investment required)

w (Level of investment required) > w (Royalty rate)

w (Royalty rate) > w (Franchise network growth rate)

w (Franchise fee) < w (Franchise network growth rate)

As we can see from Figure 28, “Dodo Pizza” ranks first, with an index value of 1. It is followed by “Cofix”, then “Burger King” and “Dominos”. Table 13 shows the numerical rating values of each restaurant analyzed by the “Financial Conditions” criterion.

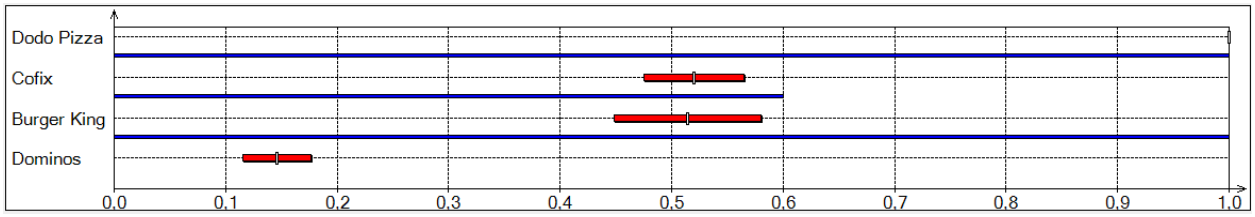

Figure 28 *Aggregated preference indices visualization for « Quality / Product»*

Table 13 Aggregated preference indices for « Quality / Product»

	Dodo Pizza	Burger King	Domino’s	Cofix
Index	1,000	0,514	0,145	0,520
Rank	**1**	**3**	**4**	**2**
St Dev	0,000	0,066	0,030	0,044

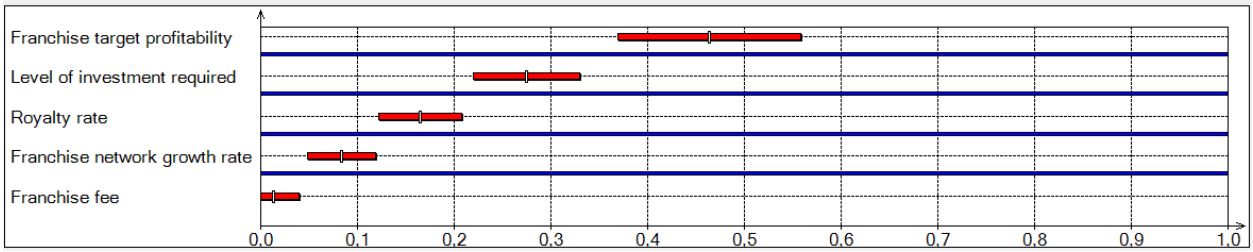

Figure 29 *Weight-coefficients estimations visualization for « Quality / Product»*

Weight of index	Min	Max	Mean	StDev	Rank
w(Level of investment required)	0,1500	0,4000	0,2750	0,0544	2
w(Royalty rate)	0,1000	0,2500	0,1650	0,0431	3
w(Franchise target profitability)	0,3000	0,7000	0,4633	0,0939	1
w(Franchise network growth rate)	0,0500	0,1500	0,0833	0,0350	4
w(Franchise fee)	0,0000	0,1000	0,0133	0,0256	5

Figure 30 *Statistics of admissible weight-coefficients values for « Quality / Product»*

Above, an analysis was made of six branches of indicators that affect the attractiveness parameters of a franchise. However, now the last stage remains – to aggregate all six groups of characteristics together to compute the final index for each of the companies. In order to do this, average scores of companies in each group of indicators from the previous analysis will be used.

Table 14 Aggregated preference indices for six groups of factors

	Brand name / Reputation	Franchisor Support	Scaling conditions	Operation Processes	Quality / Product	Financial Conditions
Dodo Pizza	0,530	0,960	0,686	0,962	0,270	1,000
Burger King	1,000	0,492	0,538	0,669	0,861	0,514
Dominos	0,563	0,403	0,331	0,042	0,342	0,145
Cofix	0,000	0,179	0,111	0,492	0,489	0,520

The following relationships among weight coefficients were set in accordance with results that we obtained through a survey:

w (Financial Conditions) > w (Brand name / Reputation)

w (Brand name / Reputation) > w (Franchisor Support)

w (Franchisor Support) > w (Operation Processes)

w (Operation Processes) > w (Quality / Product)

w (Scaling Conditions) < w (Quality / Product)

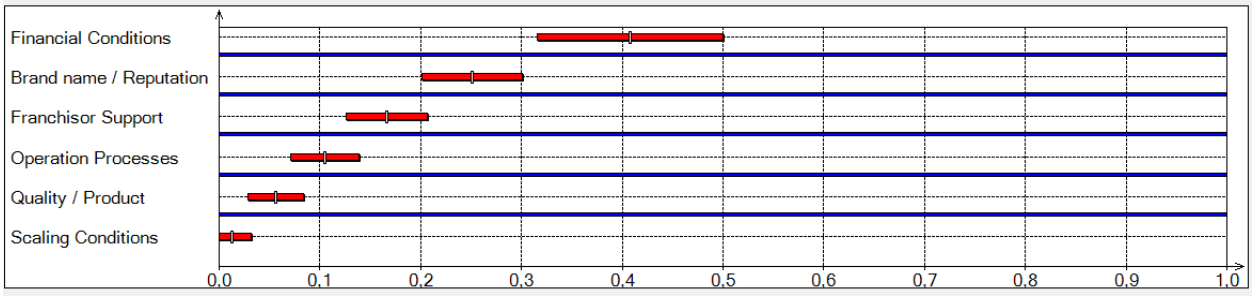

Figure 31 *Weight-coefficients estimations visualization for final evaluation of franchises*

Weight of index	Min	Max	Mean	StDev	Rank
w(Brand name / Reputation)	0,1000	0,4000	0,2512	0,0492	2
w(Franchisor Support)	0,0750	0,2750	0,1666	0,0395	3
w(Scaling Conditions)	0,0000	0,1000	0,0131	0,0191	6
w(Operation Processes)	0,0500	0,2000	0,1054	0,0335	4
w(Quality / Product)	0,0250	0,1500	0,0559	0,0273	5
w(Financial Conditions)	0,2500	0,7500	0,4078	0,0915	1

Figure 32 *Statistics of admissible final weight-coefficients for six group of factors*

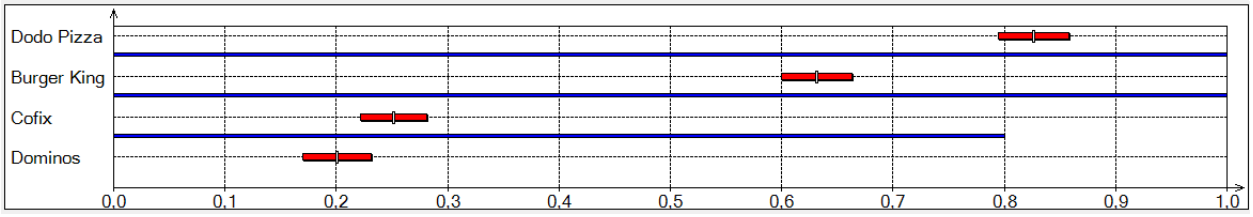

Figure 33 *Aggregated preference indices visualization for final evaluation of all franchises*

Aggregated index of alternative	Min	Max	Mean	StDev	Rank
Q(Dodo Pizza)	0,7442	0,9280	0,8260	0,0311	1
Q(Burger King)	0,5128	0,6888	0,6314	0,0317	2
Q(Dominos)	0,0809	0,2577	0,2011	0,0307	4
Q(Cofix)	0,1872	0,3627	0,2511	0,0290	3

Figure 34 *Statistics of aggregated final indexes of franchises attractiveness evaluation*

As can be concluded from the tables above, the final rating of the indicator groups is as follows:

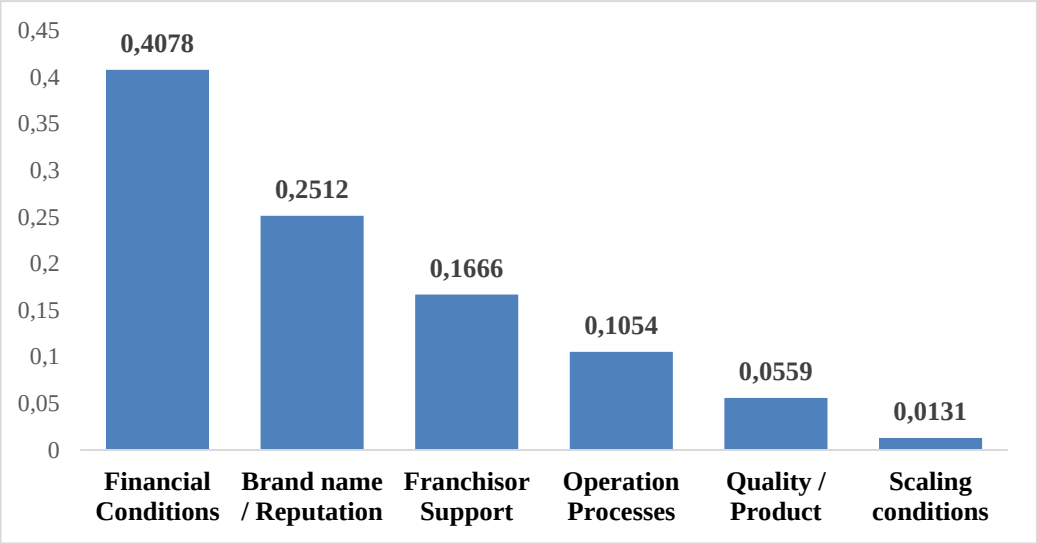

Figure 35 *Final rating of the franchise attractiveness indicator groups, according to APIS calculations*

After ranking the analyzed companies by franchise attractiveness score, the final rating can be formed as follows:

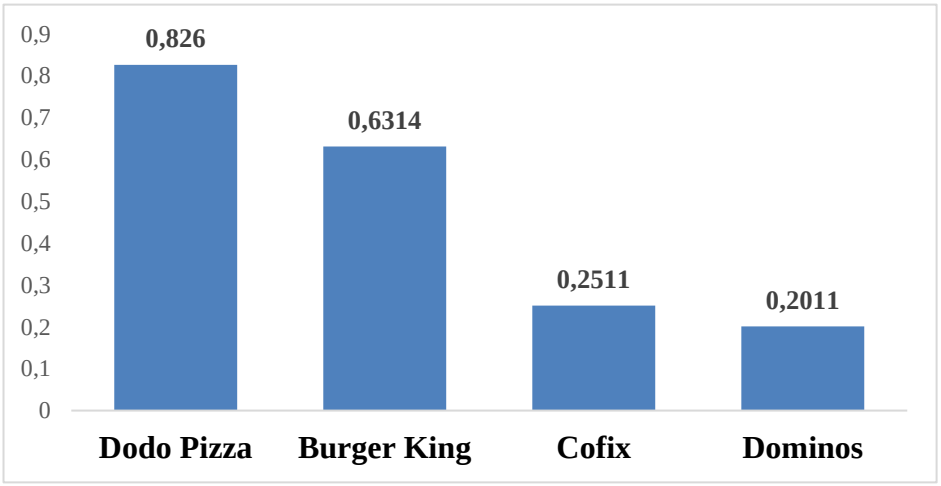

Figure 36 *Final scores of the franchise attractiveness of the analyzed companies, according to APIS calculations*

Thus, the developed framework for assessing the attractiveness of the franchise offer of restaurants was successfully applied using four companies as an example. The results turned out to be similar to the expectations of experts and the current situation in the restaurant franchising market. This confirms the relevance and appropriateness of the developed framework.

Summary of Chapter 3

In the last chapter of the study, the author applies the developed framework, simultaneously explaining each of its stages. At the beginning of the chapter, a general overview of the franchising market conditions in Russia is given, followed by the rationale for choosing case companies for research. As a result, four companies were analyzed, represented by various segments of the restaurant franchising market, such as fast food, fast casual and dining out. Selected companies are Burger King, Domino`s, Dodo Pizza and Cofix.

Based on the analysis of six groups of factors, aggregation was performed and a rating of the most attractive offers for the investor was compiled. The ranking is as follows:

1. Dodo Pizza
2. Burger King
3. Cofix
4. Dominos

This suggests that on the market of the Russian Federation at the moment, Dodo Pizza has the most attractive franchise offer, and Cofix – the least among the selected companies. Among the data obtained, the following ranking of the importance of the criteria branches for the investor in assessing franchised offers can be distinguished:

1. Financial Conditions
2. Brand name / Reputation
3. Franchisor Support
4. Operation Processes
5. Quality / Product
6. Scaling conditions

Also, thanks to the analysis, the problem at a lower level can be investigated and understanding the specific criteria in each branch of the factors that affect the investor's decision. Among these criteria there are criteria supported by IT solutions, their role in franchising was described in the first chapter of the study.

Thus, the framework allows analyzing not only attractive aspects, but also the weaknesses of a particular franchising offer. This allows company management to work on business models of their franchising offer and make it more competitive on the given market.

CONCLUSION

The goal of the paper was to identify the factors that influence the choice of a particular franchise in restaurant business by an investor, as well as to assess the impact of digitalization on the attractiveness of contemporary franchising offerings.

As part of this thesis, a comprehensive framework was developed to assess the attractiveness of franchises in the restaurant industry. The first part of the study focused on developing a list of criteria for evaluating franchise offers, through identification of the definitions related to the problem, analysis of scientific literature and experts' interviews. The latest trends of the industry were also studied and the features associated with its digitalization were highlighted. Specific factors influencing the choice of investors based on digitalization were also obtained from the survey of HoReCa industry experts and added into the model. The chapter ends with the formation of a hierarchical system of criteria designed for use in assessing the attractiveness of franchising models.

In the second chapter, the author identified the research methodology of the current paper, compared the methods possibly relevant for the solution of the problem of multiple-criteria decision making and chose the most suitable method. The existing data analysis methods under several criteria and uncertainty were investigated and the most suitable method of data analysis was selected. Thus, the method chosen was APIS (Aggregated Preference Indices Method). In the last section of the second chapter, the developed framework is presented and described. In the third chapter the application of the framework resulted in the assessment of four franchising offerings of companies in the Russian restaurant market. As a result, each of four restaurant chains was given an individual franchising attractiveness score, based on the company`s performance.

The theoretical contribution of the thesis is the development of universal framework for assessing the attractiveness of franchises in the restaurant industry. It is applicable only for the selected industry and takes into account the digital factors applicable to the restaurant business, however, with the minor changes in AHP model with obtaining new factors from experts for the specific industry, this framework can be used to evaluate different franchising offerings, such as services, retail and others.

The practical contribution of the thesis is that the developed framework will help both parties: investors will be able to more thoroughly and accurately choose franchises based on the factors and criteria included in the model. And the managers can study both the strengths and weaknesses of their franchises, track performance and compare results with similar franchise offerings to make data-driven decisions regarding improvements of their franchising business models.

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APPENDICES

Appendix 1. Questionnaire results: relative importance of characteristics

Questionaire results : relative importance of characteristics	**Exp. 1**	**Exp. 2**	**Exp. 3**	**Exp. 4**	**Exp. 5**	**Exp. 6**	**Exp. 7**	**Exp. 8**	**Exp. 9**	**Average**
Brand name / Reputation	**0,2**	**0,19**	**0,25**	**0,17**	**0,20**	**0,17**	**0,20**	**0,17**	**0,14**	**0,183**
Brand age	2	2	3	3	2	2	1	2	5	**2,444**
Brand recognition	5	6	6	5	5	6	7	4	5	**5,444**
Size of existing customer base	4	4	3	6	4	4	4	3	3	**3,889**
Federal advertising campaign	3	6	5	5	3	5	4	3	2	**4,000**
The total number of franchisees in the network	4	5	5	5	3	4	6	4	5	**4,556**
Franchisor Support	**0,2**	**0,2**	**0,1**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,176**
Training center for franchisees	4	5	4	5	4	4	3	3	5	**4,111**
Franchisee consulting	7	6	3	7	5	6	6	6	6	**5,778**
Call-center (for orders) availability	3	2	2	3	4	3	3	3	4	**3,000**
Adaptable restaurant design project	2	3	4	3	3	2	2	3	1	**2,556**
Access to prime real estate sites	2	2	6	1	1	3	2	2	3	**2,444**
Local marketing guidelines	5	4	6	4	4	5	4	2	2	**4,000**
Scaling conditions	**0,1**	**0,1**	**0,1**	**0,1**	**0,1**	**0,1**	**0,1**	**0,1**	**0,1**	**0,114**
Geographical accessibility (regions)	6	5	5	4	6	7	5	5	6	**5,444**
Exclusive territory contracts	3	2	5	1	3	4	4	3	2	**3,000**
Growth options (subfranchising)	2	2	6	3	3	2	2	3	4	**3,000**
Contract length	3	3	3	1	1	3	2	2	3	**2,333**
Deferral options	4	3	2	3	3	2	2	3	1	**2,556**
Operation Processes	**0,2**	**0,2**	**0,1**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,2**	**0,161**
Foodcost and shrinkage control system	6	3	4	4	3	4	5	3	5	**4,111**
Scheduling, payroll and shift management automatization	6	7	4	5	5	6	4	2	6	**5,000**

Website (unified orders aggregator)	4	3	5	3	3	2	2	3	4	**3,222**
Real-time data analytics system	5	7	6	6	7	5	5	5	7	**5,889**
Overall IT infrastructure	7	3	6	6	7	6	4	7	6	**5,778**
Quality / Product	**0,1**	**0,1**	**0,2**	**0,1**	**0,2**	**0,1**	**0,2**	**0,1**	**0,2**	**0,142**
Product-specific quality standards	3	5	6	5	4	5	5	4	5	**4,667**
Supply chain sustainability	4	4	6	5	5	4	6	4	6	**4,889**
The simplicity of operations	2	2	4	3	4	3	5	3	4	**3,333**
Internal audits	1	2	3	3	1	4	3	4	2	**2,556**
Financial Conditions	**0,2**	**0,2**	**0,3**	**0,3**	**0,2**	**0,2**	**0,2**	**0,3**	**0,2**	**0,223**
Level of investment required	6	6	5	7	7	6	5	6	6	**6,000**
Royalty rate	7	5	3	7	6	4	4	5	5	**5,111**
Franchise target profitability	6	7	5	6	7	7	4	6	7	**6,111**
Franchise network growth rate	2	5	6	5	4	4	6	5	5	**4,667**
Franchise fee	4	3	2	5	5	3	4	6	4	**4,000**

Appendix 2. Survey for Franchise Attractiveness evaluation

The survey of experts regarding the franchising attractiveness factors for a potential investor in the restaurant industry

This questionnaire is devoted to the collection of expertise regarding franchise attractiveness of several companies. The evaluations of expected and performed level of franchising attractiveness factors from investor`s point of view will be further compared.

The survey is conducted as part of the research for the Master in Management Program Thesis in Graduate School of Management, Saint-Petersburg State University.

The organizer of the study ensures not to disclose any personal information. The collected information will be processed using DSS APIS and will reflect a generic character.

Your answers are very important to obtain high quality results.

If You have questions, please, contact the organizer of the research directly.

Contact information: Valerii Iodko

+7 (981) ***-**-**

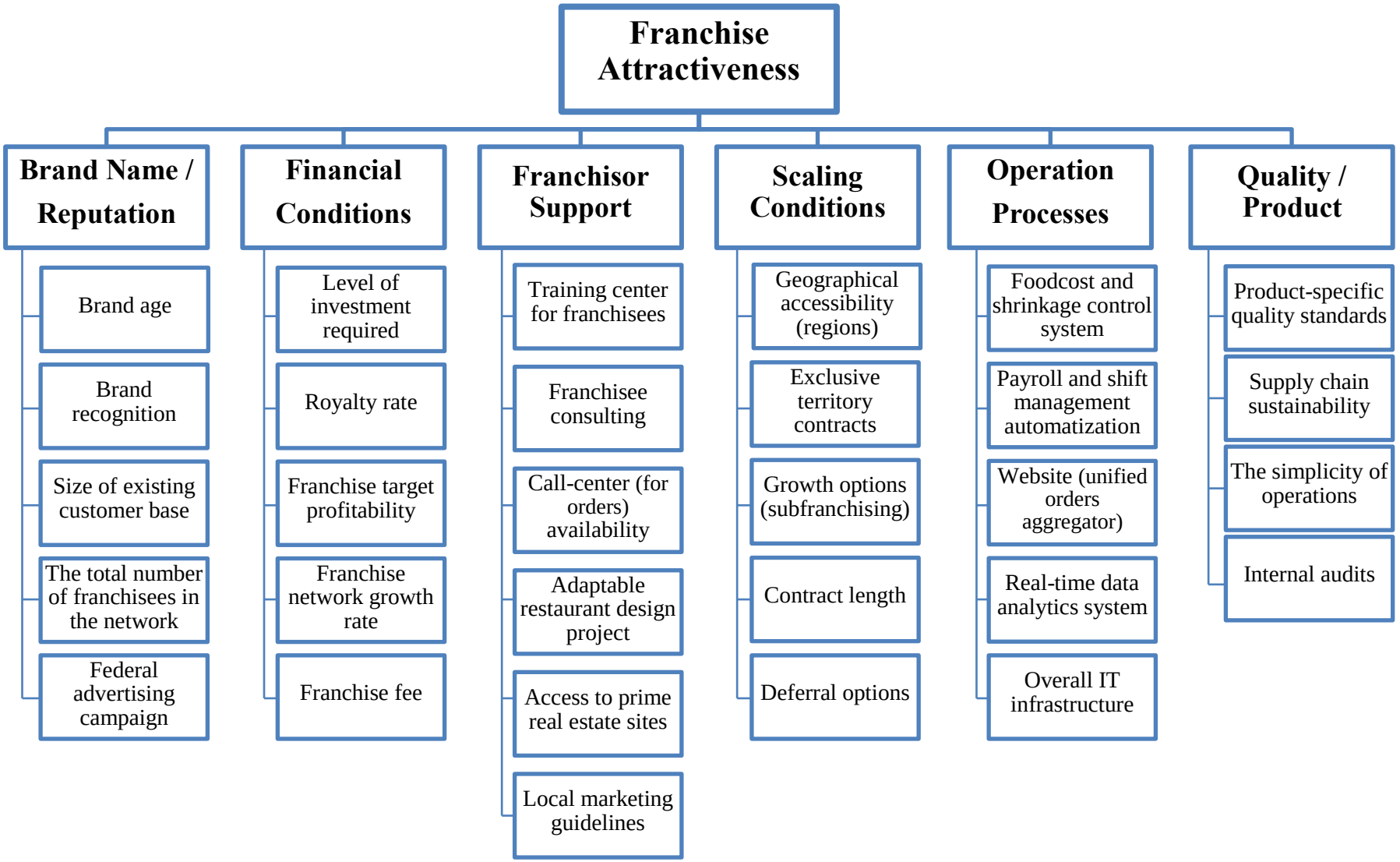
E-mail:

st071313@student.spbu.ru

Thanks so much for your time and effort! We study the **factors that influence the investor's choice of a franchise in the restaurant business**.

First, you will see a diagram with the franchise attractiveness assessment characteristics.

You will be asked to allocate points to each criterion in the diagram.

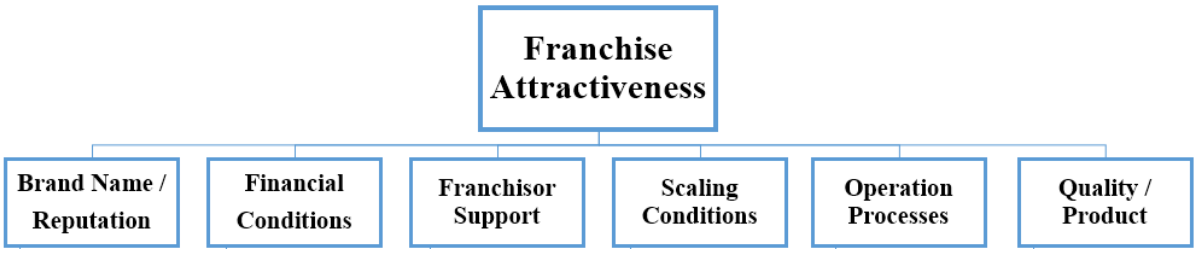


Please answer the following questions:

The selection of each franchise can be made based on the characteristics presented above. Questions will follow according to each group of factors presented on the graph. At the highest layer, six groups of characteristics are identified:

- Brand Name /Reputation
- Financial Conditions
- Franchisor Support
- Scaling Conditions
- Operation Processes
- Quality / Product

1. Please, **distribute 100 points between six groups** of characteristics presented above according to their relative importance, with more points indicating characteristics that are more important. Do not hesitate to look through with the characteristics within each group (previous page) to see how they affect the groups.



Group:	Score: (100 total)
• Brand Name / Reputation	
• Financial Conditions	
• Franchisor Support	
• Scaling Conditions	
• Operation Processes	
• Quality / Product	

For the next questions, please rate the importance of characteristics **with a 7-point scale** according to the degree of influence of these characteristics on an overall attractiveness of franchise, where:

1. Not at all important
2. Low importance
3. Slightly important
4. Neutral
5. Moderately important

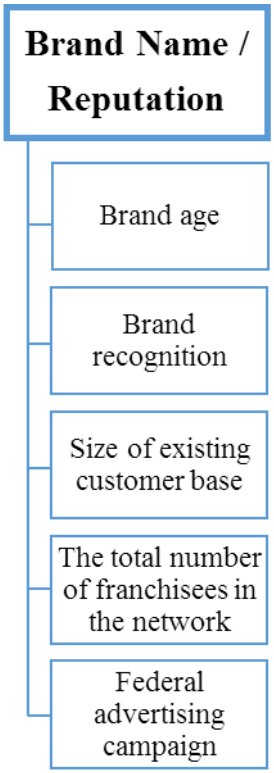
6. Very important

7. Extremely important

For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «**No impact**» , «**Low**», «**Medium**» and «**High**».

2. Please rate the characteristics of «**Brand Name / Reputation**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.

For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact», «Low», «Medium» and «High».



Characteristics	Scores	IT impact
Brand age		
Brand recognition		
Size of existing customer base		
Federal advertising campaign		
The total number of franchisees in the network		

Brand age –the total duration of the brand's existence in the market.

Brand recognition – brand recognition by consumers.

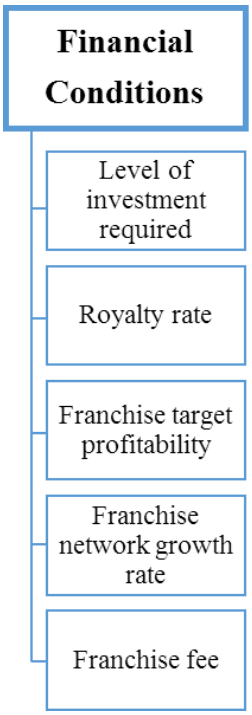
Size of the existing customer base – the size of the current customer base of consumers.

Federal advertising campaign – the presence of a federal marketing company in the country or region promoted by the franchisor company.

The total number of franchisees in the network – the total number of restaurants in the franchisor network in the country.

3. Please rate the characteristics of « **Financial Conditions**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.

For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact», «Low», «Medium» and «High».



Characteristics	Scores	IT impact
Level of investment required		
Royalty rate		
Franchise target profitability		
Franchise network growth rate		
Franchise fee		

Level of investment required – the level of the franchise cost (the cost of the restaurant).

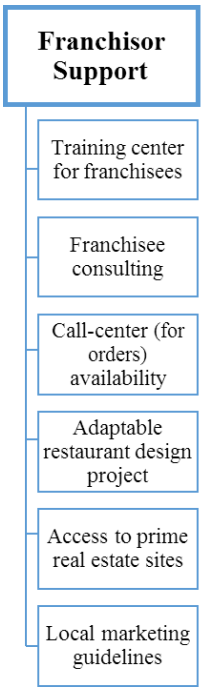
Royalty rate – the monthly royalty rate.

Franchise target profitability – the expected return on investment.

Franchise network growth rate – an index of the growth of new stores to the network.

Franchise fee – the amount of a lump-sum payment.

4. Please rate the characteristics of «**Franchisor Support**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.



For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact» , «Low», «Medium» and «High».

Characteristics	Scores	IT impact
Training center for franchisees		
Franchisee consulting		
Call-center (for orders) availability		
Adaptable restaurant design project		
Access to prime real estate sites		
Local marketing guidelines		

Training center for franchisees – the presence of a corporate training center for training potential franchisees.

Franchisee consulting – comprehensive assistance of the franchisee both at the opening stage and operational consulting during the work of restaurants.

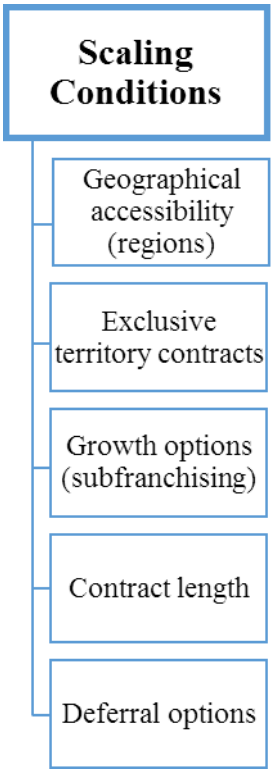
Call-center (for orders) availability – the ability to use the services of a franchisor call center without the need to create a separate call center.

Adaptable restaurant design project – the ability to quickly calculate a design project for a specific selected location.

Access to prime real estate sites – help franchisees in the search for real estate and its maintaining corporate database of franchisor objects.

5. Please rate the characteristics of «**Scaling Conditions**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.

For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact» , «Low», «Medium» and «High».



Characteristics	Scores	IT impact
Geographical accessibility (regions)		
Exclusive territory contracts		
Growth options (subfranchising)		
Contract length		
Deferral options		

Geographical accessibility (regions) – franchise availability in various regions of the country.

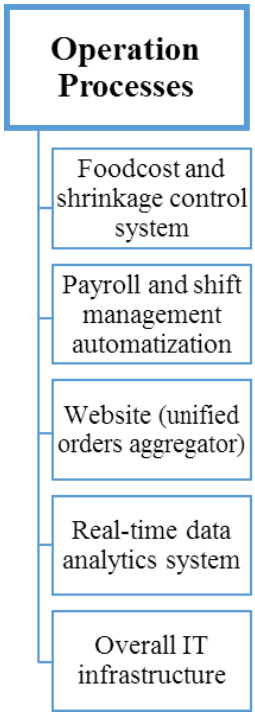
Exclusive territory contracts – the ability to conclude a contract for the entire geographical region or territory, without the right to transfer to other franchisees.

Growth options (subfranchising) – the opportunity to become a partner (sub franchisee) in the region.

Contract length – the duration of the franchise contract.

Deferral options – the ability to defer franchise payments (royalties, food costs).

6. Please rate the characteristics of «**Operation Processes**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.



For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact» , «Low», «Medium» and «High».

Characteristics	Scores	IT impact
Foodcost and shrinkage control system		
Scheduling, payroll and shift management automatization		
Website (unified orders aggregator)		
Real-time data analytics system		
Overall IT infrastructure		

Food cost and shrinkage control system – IT analytics systems allowing to track the margin of goods, their costs, as well as analyze shrinkage of products.

Scheduling, payroll, and shift management automatization – IT systems to optimize staff time, compile work shifts, and payroll.

Website (unified orders aggregator) – a general site for aggregating orders (no need to create own website and attach a payment system for the franchisee).

Real-time data analytics system – IT systems that allow analyzing data on sales, revenue growth, margin and profitability of a business in real time. Ability to create OLAP reports and visualize data.

Overall IT infrastructure – the general level of manufacturability (digitalization of the kitchen, delivery system, processes of acceptance, and distribution of orders).

Product-specific quality standards – the existence of network quality standards and monitoring of their compliance.

Supply chain sustainability – a flexible supply chain that works without fails (the ability to quickly replace missing ingredients through other suppliers).

The simplicity of operations – the level of simplicity of operational processes (optimization).

Internal audits – the presence of an internal control system (Mystery Shopper, audit from the franchisor).

7. Please rate the characteristics of «**Quality / Product**», with a 7-point scale, 7 representing it has an extremely important impact and 1 being it has not at all impact.

For the column «IT impact», please rate the penetration of IT technologies and degree of digitalization on the characteristics as: «No impact» , «Low», «Medium» and «High».

Characteristics	Scores	IT impact
Product-specific quality standards		
Supply chain sustainability		
The simplicity of operations		
Internal audits		

Product-specific quality standards – the existence of network quality standards and monitoring of their compliance.

Supply chain sustainability – a flexible supply chain that works without fails (the ability to quickly replace missing ingredients through other suppliers).

The simplicity of operations – the level of simplicity of operational processes (optimization).

Internal audits – the presence of an internal control system (Mystery Shopper, audit from the franchisor).

Your answers are very important to the organizer of this study and successful completion of the research.

Please feel free to contact the organizer of the study if you would like to receive more information on the project, have questions about how the information will be stored, or have additional feedback related to the subject of the study.

Valerii Iodko

mob.: +7-981-xxx-xx-xx

Please also provide your contact information as well as brief information about yourself in the space below. You may be contacted to clarify the answers.

Name: _____

Occupation: _____

e-mail: _____

Mobile phone: _____

Thank you for your participation in the survey!